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# RECREATIONAL USE OF THE LOWER BLACKFOOT RIVER

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# RECREATIONAL USE OF THE LOWER BLACKFOOT RIVER

by

Gerald T. Walker

April, 1977

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TABLE OF CONTENTS


| | Page |
|---|---|
| PREFACE | iv |
| SUMMARY | v |
| Chapter | |
| I. INTRODUCTION | 1 |
| The Blackfoot River Conservation and Recreation Management Plan | 1 |
| Implementation of the Management Plan, 1976 | 3 |
| Public Input | 4 |
| Research Objectives | 7 |
| Organization of the Report | 8 |
| II. OVERVIEW OF AREA | 9 |
| Past Uses of the Blackfoot River | 9 |
| Recreational Resources | 13 |
| Seasonal Nature of Activities | 13 |
| III. RESEARCH METHODOLOGY | 16 |
| The Study Area | 16 |
| The Study Population | 16 |
| Sampling Design | 17 |
| Questionnaire Design and Administration | 18 |
| IV. DESCRIPTION OF THE BLACKFOOT RIVER USER | 22 |
| Introduction | 22 |
| Socio-Demographic Information | 23 |

| Chapter | | Page |
|---|---|---|
| | Trip Context | 30 |
| | Preferences and Perceptions | 44 |
| | Awareness of Recreation Management Efforts | 51 |
| | Recreation Management Opinions | 55 |
| | Summary | 70 |
| V. | USE ESTIMATION | 74 |
| | Procedures | 74 |
| | Use Estimates | 78 |
| | Activity Participation Estimates | 78 |
| | Summary | 81 |
| VI. | PROPOSED GUIDELINES | 82 |
| | General Administration Recommentations | 82 |
| | Specific Recommendations for Recreation Access Areas | 89 |
| | Conclusion | 98 |
| LITERATURE CITED | | 100 |
| APPENDIX A: | Sampling Schedule | 101 |
| APPENDIX B: | The Questionnaire | 105 |
| APPENDIX C: | The Observation Data Sheet | 108 |
| APPENDIX D: | Blackfoot Recreation Management Area - A Description of Use Along Each Section of the River | 110 |
| SECTION MAPS | | 159 |

# PREFACE

This study was made possible through funds provided by the Missoula County Commissioners and the Montana Department of Fish and Game Commission. The survey constitutes a description of the recreational resources and summer recreation use patterns for the Blackfoot River Corridor from Johnsrud Park, upstream to the Missoula/Powell County line, including relevant access sites on the lower Clearwater River, in 1976.

The study and the first summer of on-the-ground implementation could not have been made possible without the help of many people. Major contributors were survey assistants Peter Gyori and Robert Shacklett; Hank Goetz and Scott Kuehn of the Lubrecht Experimental Forest; Tom Greenwood, Wes Burnett and Dan Neal of the Montana Department of Fish and Game; Dr. Joel Meier, Dr. William McBroom, Dr. Arnold Bolle and Dr. Robert Wambach of the University of Montana; Paul May and Chuck Wright of the Montana Division of Forestry; Chuck Seeley, Joe Sieminski, and Ernie Corrick of Champion Timberlands; Jerry Stokes and Vaughn Baker of the Bureau of Outdoor Recreation; Land Lindbergh, Bill Potter and Johnny Stone, river corridor landowners, and Chuck Hollenbaugh, formerly with the Missoula County Planning Board. A special thanks is extended to Dr. Stephen McCool for editing assistance and Sandra Robbins for typing assistance. Of course, the results are dependant upon the gracious cooperation of the Blackfoot River users who participated in the study.

## SUMMARY

The highlights of the research and the important recommendations are presented in this brief summary.

### Research Findings

1. Missoula County residents accounted for 60 percent of the total use within the Blackfoot study area. Another 20 percent of the use was by Montana residents living outside of Missoula County, but primarily from counties in the western part of the state.

2. One day outings accounted for 60 percent of all the visits to the Blackfoot River. Out of state visitors accounted for a greater proportion of longer visits (greater than one day) to the Blackfoot River than did Montana residents.

3. Almost 30 percent of the users contacted had no previous experience on the Blackfoot River. Out of state visitors represented a higher proportion of these first year users than did Montana residents. Surprisingly, out of state visitors also accounted for a greater proportion of long time users (15 years or longer) than did Montana residents.

4. Fishing was the most popular summertime recreational activity within the study area. Over 80 percent of all respondents indicated that they fished the Blackfoot River. Other popular activities included: relaxation (52.2 percent), camping (49.0 percent), picnicking (48.0 percent), swimming (36.6 percent), hiking (34.0 percent), sightseeing (30.4 percent) and rafting (25.4 percent).

5. If the Blackfoot River became unavailable for recreational use, respondents indicated that they would shift their use to, mainly, other western Montana rivers. The Bitterroot River, the Clark Fork River and Rock Creek were most frequently named. Montana residents felt more strongly (46.2 percent) that these other areas were not as suitable as the Blackfoot for their recreational interests than did out of state visitors (30.6 percent).

6. More Montana residents (27.6 percent) felt that areas were "too crowded" than did out of state visitors (12.9 percent). Only 2.7 percent of the Montana residents thought that areas were not used enough, as compared to 5.4 percent of the non-residents who held this opinion.

7. A higher proportion of Montana residents (13.5 percent) indicated more facility development was desirable than did out of state visitors (9.6 percent). Overall, only 12.7 percent of all the respondents felt more facility development was desirable.

8. The state of Montana was favored (63.9 percent) over Missoula County (41.5 percent) and the federal government (14.1 percent) by Blackfoot users to manage recreational use within the Blackfoot River corridor.

9. Only 30 percent of the users contacted were aware of efforts to manage recreational use on the Blackfoot River. The most effective methods through which these users were informed of management efforts were friends (44.4 percent), newspaper (32.4 percent) and official sources (16.9 percent).

10. Blackfoot River users agreed that users should be responsible for packing out their own garbage, that the natural character of the river corridor should be preserved, that areas should be set aside for non-motorized uses, and that campsites should be located off the riverbank. Users also agreed to a lesser extent that present access was adequate, directional signing to campgrounds was adequate, the number of campgrounds was sufficient and that law enforcement patrol in the campgrounds was sufficient.

11. Blackfoot River users disagreed that camping should be restricted to public overnight campgrounds, that a "fly fishing" only segment of the river be designated, that bank fishing and floating were conflicting uses, that the Sunset Hill Road be closed, and that landowners charge the public directly for allowing use of their land.

12. Users felt that the best parts of the recreation management plan were the provisions for access and facilities, and the preservation of the river corridor. Complaints centered mainly around various restrictions placed on public use of private land. Restricted camping on private land was the most frequently mentioned complaint.

13. Total study area use was estimated to be in excess of 20,000 visits for the summer use season (June 21 - September 22). The area of the river corridor which was most heavily used was that lying between Johnsrud Park and the Whitaker Bridge. Weekend use accounted for over 60 percent of the total summer use in 1976.

## Recommendations

1. The implementation of the recreation management program, as initiated last summer, should continue. The formal recreation lease agreement between the individual landowners and Missoula County should be signed prior to the summer use season.

2. An individual should be hired each summer under the supervision of the Advisory Council to administer the program and patrol the river corridor daily.

3. The recreation management aspect of the program should be administered by a public agency equipped to do so. The alternatives include continued Missoula County administration, Montana Department of Fish and Game administration, joint administration between these two agencies, and possibly joint administration with these agencies and an incorporated group of interested citizens. These alternatives and others should be actively investigated to insure smooth operation of the program in the future.

4. The orientation of the recreation management program should continue in the direction of providing day use opportunities for local Missoula County residents.

5. The establishment of at least one vehicle overnight camping area in the vicinity of Whitaker Bridge is necessary to relieve congestion in other corridor campgrounds. Provisions must also be made for floater camping in the upper river corridor.

6. The problem of adequately informing users about the area, and its opportunities and restrictions, without attracting more people to the area must also be addressed. Interpretive signing along the

river corridor (at a great enough distance from the highway so the casual highway traveller is not attracted to the area), hand out brochures, and continued local media coverage can be effective in informing the users and reducing the potential for confrontation between the recreationist and the recreation manager.

7. The pack-in, pack-out policy for trash should be continued at all areas (except possibly Johnsrud Park, Clearwater Crossing and Harpers Lake).

8. The areas of the Blackfoot River presently closed to motorized vehicular use should remain closed, particularly the Conservation Reserve and the backcountry area near Whitaker Bridge.

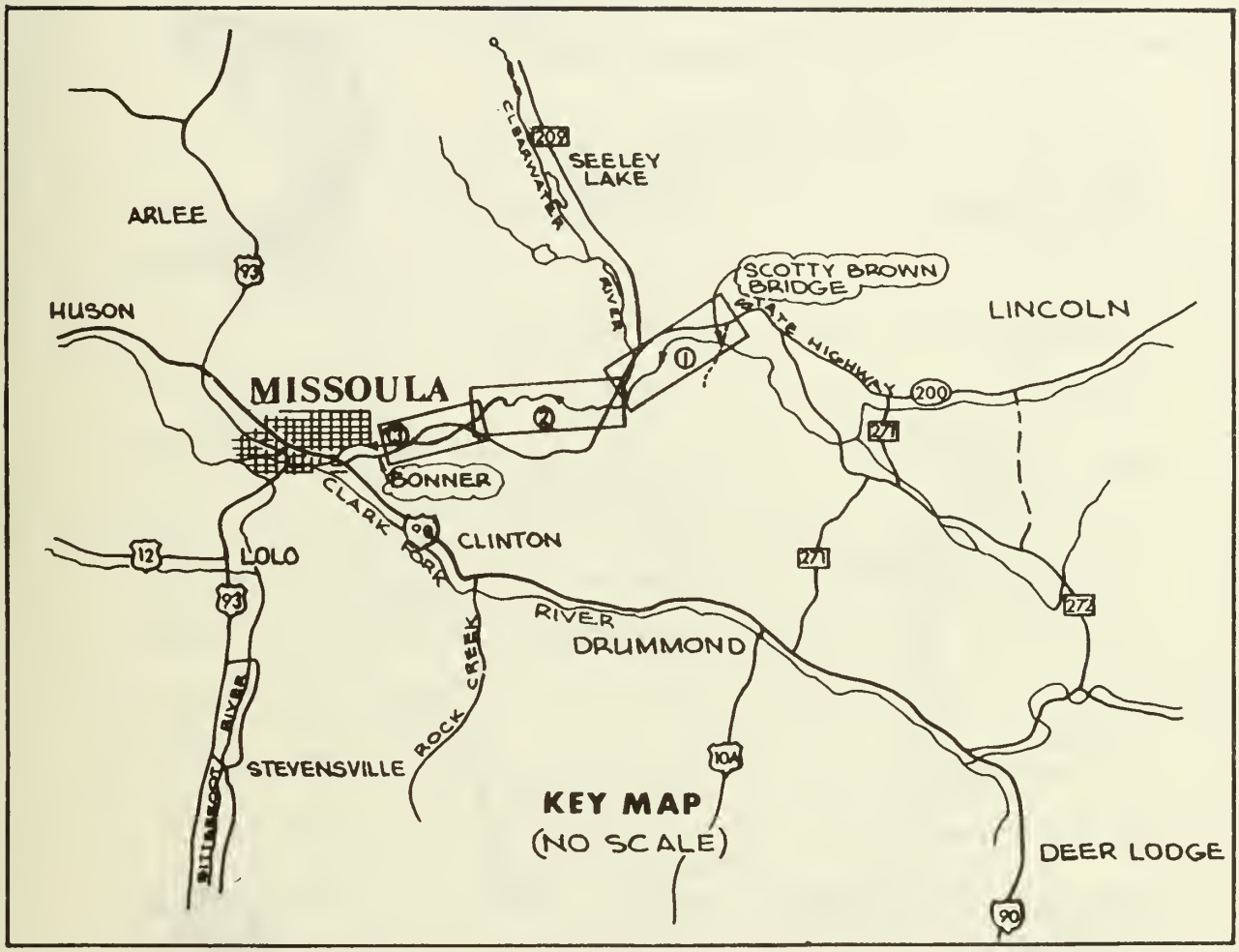
9. The campsites at existing overnight camping areas should be moved at least 100 feet away from the riverbank.

10. Two informally used areas (Thibodeau Rapids and Sunset Landing) should be formally declared as day use sites. Otherwise the number of existing river access sites should remain at the present level.

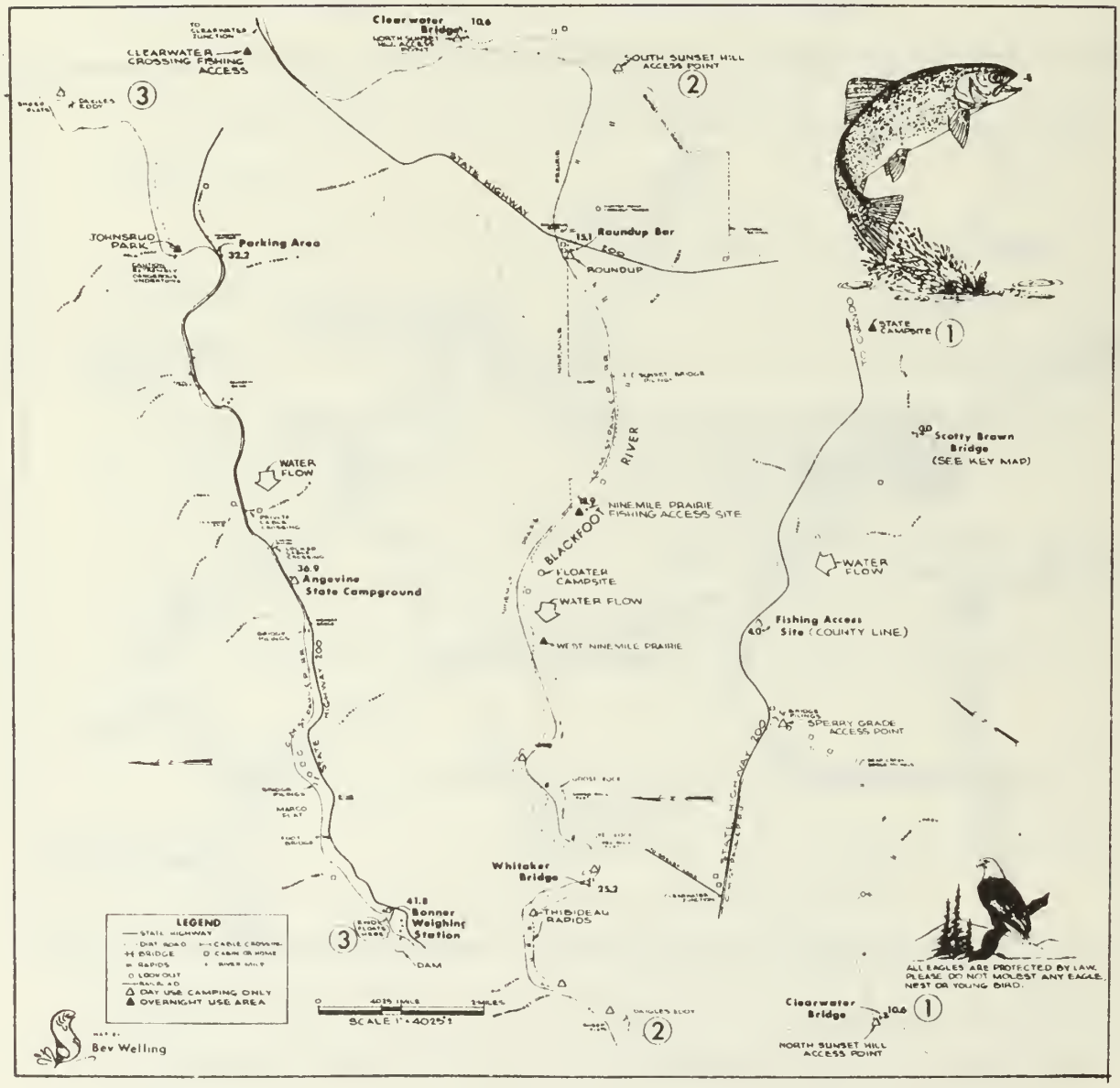
11. The proposals to create a "fly fishing" only segment of the river and to close the Sunset Hill Road should <u>not</u> be acted upon at this time because of wide-spread public disapproval.

12. Many specific recommendations are reported for the recreation access areas. The most important ones pertain to upgrading or providing restroom facilities at existing overnight camping areas and protecting fragile areas (especially the steep riverbank, terraces and the beach areas) along the river corridor from vehicle and other incompatible uses.

Blackfoot River Vicinity Map



Blackfoot River - Study Area from River Mile 4.0 (County Line) to River Mile 32.2 (Johnsrud Park).



# CHAPTER I

# INTRODUCTION

## The Blackfoot River Conservation and Recreation Management Plan

The culmination of over five years of work by various individuals, corporations, and public agencies became reality this past summer when the Blackfoot River Conservation and Recreation Management Plan (Nature Conservancy and the Bureau of Outdoor Recreation, 1976) was implemented. The plan was deemed necessary because of homesite development pressures and recreation related conflicts among users and private corridor landowners. This approach was taken because of landowner opposition to more formalized river protection methods, especially federal Wild and Scenic River designation. The objective of the plan was defined: To protect the natural, scenic, and recreation integrity of the Blackfoot corridor through effective management of public recreation and restrictions on ecologically incompatible uses and development. To accomplish this, it was recommended that recreation leases or recreation easements be used as formal agreements between private landowners and public agencies to assure responsible management of public use and that conservation easements be used to protect the river corridor in future development.

The plan is the product of a results-oriented planning process that has emphasized local involvement and direction. The goal of the plan is to provide primarily day use opportunities within the river

corridor for Missoula County residents. The result of this effort is an evolutionary, yet functional, skeletal framework within which recreation management and river protection objectives can be achieved. Providing a preliminary management approach, the plan is specific enough to give direction to an overall management program, yet general enough to allow considerable modification. The structure of the plan ensures that the local landowners, land managers, and public agencies, in cooperation with the local public, will determine the future character of the Blackfoot River.

While this project involves two interrelated concepts, recreation user management and conservation of the natural and scenic qualities of the river, the former will be dealt with in this report. The conservation easement program through which the Blackfoot River corridor will ultimately be protected is a long term process and will be reported by others when further progress is made.

A specific recommendation of the plan called for an ecological inventory of natural features within the Blackfoot River study area. This inventory was completed and guidelines for recreational use as it relates to the natural features of the corridor have as well been proposed (McGahan, 1976). These ecological recommendations should provide a sound basis on which to manage public use. Whenever appropriate the guidelines suggested by McGahan will be cited when they reflect improper or incompatible recreation use at given localities. The ecological considerations will also play an important role in recreation management recommendations made in this report.

## Implementation of the Management Plan, 1976

The implementation of the recreation management aspect of the plan was conducted in three overlapping phases. Beginning in the middle of June, most of the remainder of the month was spent on development work to complete specific proposals outlined in the plan. This included but was not limited to general area clean-up, sign erection, vehicle barrier construction for site protection at many areas, parking lot construction at both ends of the Sunset Hill Road, development of a new access point at the Roundup site, and closure of the road into the backcountry area near Whitaker Bridge. Preparation of the use study also involved a great deal of time.

The second phase of implementation began on the Fourth of July weekend, which is typically the official beginning of the heavy summer use season. This phase involved limited enforcement of the proposals contained within the plan. Prior to this weekend all signing and site work was completed and a publicity effort was conducted through local news media to inform Blackfoot River users of both camping closures on private land, and other proposals which were contrary to historic use patterns within the Blackfoot River corridor. Although this phase lasted through the remainder of the summer and into the fall, the major work was conducted during the month of July. Through personal contact and discussion of the special recreation management project, and in conjunction with the signing and general publicity, the river users were urged to cooperate. Cooperation through education was the approach used for the first summer. Although minor problems occurred at times,

a hard-nosed "billy club" approach was avoided. By and large this approach was successful. Data on weekend campground use was also collected during July.

The final phase of the program involved an intensive investigation of both the users and also the types of use occurring in the river corridor. Sampling of the users began in July and continued daily through September 20th. Periodic examinations of use were made in October and November as well. Because the user survey demanded observation of a particular river section for a full eight hour period, patrol and management activities during the study period were greatly reduced except at problem areas. The mutual exclusiveness of surveying actual use without interference, and attempting to encourage users to cooperate with particular regulations made reduction of the latter activity necessary. The users were left to police themselves and this generally appeared to be quite successful with a few exceptions.

## Public Input

The resource using public has expressed an interest in the Blackfoot project in a number of ways including attendance at public hearings and clean up projects on the river. Interest has also been expressed regarding the organization of an ad hoc citizens advisory committee. These citizen efforts are important indicators of public acceptance of the plan. A brief summary of public input to date follows.

In mid May, 1976 following a week long period of publicity in the local news media, the Blackfoot River Plan was presented to the

public by the Blackfoot River Recreation Advisory Council, at a hearing called by the Missoula County Commissioners. At such time the objectives of the plan and all on-the-ground proposals were explained to a small but enthusiastic audience of Blackfoot users.

A second public hearing concerning the recreation management aspects of the project was held in the beginning of December, 1976 by the Missoula County Commissioners to assess public reaction to proposals implemented during the summer. Approximately 50 people attended the meeting.

The two most frequent complaints voiced by the public were that the plan provided an inadequate number of overnight campgrounds and that the new access at Roundup was inconvenient to rafters and kayakers entering and leaving the river. Also discussed were the problems related to floater camping in the upper corridor. All other proposals and plan objectives seem to have been well accepted by the users.

Specific solutions to these problems were impossible to arrive at during the meeting so a group of citizen volunteers offered to work with the Advisory Council to attempt to arrive at a solution acceptable to all parties concerned.

A group of 15 volunteer river users met with Advisory Board members in mid February, 1977. The Advisory Board presented their solutions to the problems discussed at the previous public hearing. After lengthy discussion and some minor modifications these proposals were accepted by the users. These modifications dealt with corridor parking, location of another overnight camping area between Johnsrud Park and Whitaker Bridge, location of a floater camping area in the

upper corridor, removal of portage obstacles at the Roundup Rapids, and the addition of two formalized day use sites at the Sunset Landing and Thibodeau Rapids.

During the course of this meeting a suggestion was made by a river user to organize a citizen committee to assist the Advisory Council and to generate further public support for the project. All the volunteer users agreed that they were gratified that the private landowners were attempting to protect the free flowing river resource and continuing to allow public use of their river corridor lands. The volunteer users pledged their cooperation and thanks to the landowners and public agencies involved. The feasibility and structure of the proposed citizen committee are presently being examined.

In mid March, 1977 a third public hearing was held and the proposals discussed above were presented to the public at large. The Blackfoot River users attending this meeting accepted the changes for the upcoming summer.

Another form of public input to the project has been group sponsored clean up days. One was sponsored by Trout Unlimited during the early fall, 1976 and the effectiveness was very good. Other community groups have expressed an interest in working on the river (both to clean up litter and to assist with minor facility development) during the upcoming summer. Community work projects of this type can not only alleviate litter problems but also attract favorable publicity to the entire Blackfoot River project.

## Research Objectives

The assumptions upon which the Blackfoot River Conservation and Recreation Management Plan is based (day use by local residents), the extent of user knowledge of the plan and reaction to this management approach, and the need for accurate estimations of use for the Blackfoot River corridor suggests that some basic data concerning visitors be collected. While there appear to be no present problems that may be termed "critical", such visitor information can help maintain this situation. This data can be used to assess the impact of management decisions upon visitors and visitor use patterns. And, it could be used to help formulate goals for the management of the Blackfoot River.

Therefore, the study has the following objectives:

1. Gather basic socio-demographic data on visitors.
2. Determine visitor opinions related to both the river protection scheme being attempted, and to proposed and implemented user management programs.
3. Determine visitor preferences and perceptions of user management programs, use density, and facility development.
4. Determine types and patterns of activity participation and total estimated recreational use of the Blackfoot River corridor study area for the 1976 use season.
5. Identify and describe desirable and undesirable characteristics of formal access sites along the river corridor.
6. Recommend a set of guidelines for preserving the natural and recreational values of the Blackfoot River.

## Organization of the Report

The report is divided into six chapters. Following the introduction, the second chapter is an overview of the area. In this section, the history of the river, the recreational resources and the seasonal uses are reviewed. In chapter three the research methodology is discussed. In the chapter following, the Blackfoot River user is described in terms of socio-demographic factors, trip context information, preferences and perceptions, awareness of recreation management efforts and recreation management opinions. Chapter five discusses use estimation procedures and the 1976 total corridor use figures. In the final chapter, recommendations are presented for both the general administration of the area and specific management of access sites.

These sections are followed by four appendices. Appendix A is a schedule of the sampling dates, times and weather conditions encountered. Appendix B is the questionnaire used to collect socio-demographic, preference, and opinion data from a sample of users encountered within the Blackfoot River corridor. Appendix C is a copy of the data sheet used by the researchers to collect observational data on corridor use. Appendix D reviews, in detail, the natural characteristics, the activity participation patterns, and special problems within each section of the river corridor. Guidelines for correcting site problems discussed in Appendix D will be made in the recommendations section (Chapter Six) of this report. A set of three maps describing the river sections follows the appendices.

# CHAPTER II

## OVERVIEW OF AREA

The purpose of this chapter is to present some background information concerning recreational use of the Blackfoot River. This will assist the manager in better understanding the present situation on the Blackfoot River.

### Past Uses of the Blackfoot River

The Blackfoot River has not always been perceived as valuable primarily as a recreational resource. In fact, until recently the river was thought of primarily for its utilitarian uses. Since recorded history began, the Blackfoot has been used as a transportation corridor, as a source of irrigation water, as a setting for commercial recreation enterprises, and finally as a public recreation place. Another potential use which has yet to be realized but which is often discussed, is dam construction for hydro-electric power and water storage. This section will review each of these varied uses and the part they have played in the history of the Blackfoot River.

Little is known about the early native inhabitants of this area. The uses which various American Indian groups made of the Blackfoot River is speculative. Certainly they camped on its shores, drank from its tributaries, and walked its banks in search of fish and game. The corridor may also have been used for seasonal travel to

other areas of the state. Artifacts can be found along the Blackfoot and Clearwater Rivers to this day.

It is generally recognized that the Flathead, Kutenai, Pend d'Oreille, and the Blackfeet tribes inhabited this area at various times from at least 1650 to 1850. Exact boundaries between these tribal groups are difficult to place and movements of these people were often extensive during this period. All of these tribes and possibly others used the Blackfoot area (Conklin, 1975).

The Lewis and Clark Expedition of 1804-1806 began the written history of the area. After the acquisition of the Louisiana Purchase in 1803 by the United States, Lewis and Clark were sent by President Jefferson to explore this new region. Although they did not explore the Blackfoot River they passed its mouth while traveling westward along the Clark Fork River in 1805 (Conklin, 1975).

Following Lewis and Clark came the fur companies and their trappers. Undoubtedly many fur trappers worked the Blackfoot River until the fur trade diminished in the mid-1800's, although this fact is hard to substantiate because of the lack of written records.

Perhaps the first actual use of the Blackfoot River as a transportation medium was made by mining companies which began operations in the upper Blackfoot River valley in 1865. The Helena Herald reported in March, 1870, that "Henry Buck and others built three boats to go from Lincoln on the Blackfoot River to Cedar Creek mines (but floated only as far as Frenchtown and packed the rest of the way)" (Browman, 1974). The Missoulian reported that in 1881, "Northern Pacific Railroad contracted with Eddy Hammond and Company to furnish

ties for tracks being constructed between the Little Blackfoot River and the Idaho state line" (Browman, 1974). It was reported as well that the Blackfoot River was used extensively to float ties during the years 1881 to 1883 (Browman, 1974).

Further use of the Blackfoot River as a transportation corridor was made by the lumber industry. The first large scale logging along the Blackfoot River began in 1885. As no roads existed along the river from Bonner to Fish Creek, the timber was skidded by oxen to the river during the winter months, and floated down river in the spring. During the spring of 1886, twenty million board feet of logs were floated from the Fish Creek camp to Bonner in the first log drive on the Blackfoot River (Browman, 1974). Logging drives continued sporadically until 1928. The last Blackfoot drives in 1927 and 1928 contained a combined volume of about 60 million board feet of timber (Browman, 1974).

In the early 1900's road building began in the Blackfoot country and eventually spanned the length of the river. By the 1930's trucks replaced the river and the railroads as the method for removing timber. At this time access to the river was still difficult and fishing and hunting were probably the main recreational activities.

Commercial use of the Blackfoot River by area landowners began in the 1930's. Two of these uses continue today and constitute the major direct uses of the river other than public recreation. One of these uses is related to recreation and one to agriculture. The commercial recreational use of the Blackfoot is made by guest ranches and guide-outfitters. One of the oldest continuing guest ranch

operations in the state began in the 1930's on the Blackfoot and continues to this day. Other commercial guides and outfitters continue to provide recreational services on the Blackfoot River.

The other major commercial use made of the Blackfoot River is for irrigation. The majority of water for this is pumped from the river in the Ninemile Prairie and in the vicinity of Ovando and Helmville.

Major dam building proposals have been presented for the Blackfoot River over the years but none have been carried out to this date. Small dams and irrigation impoundments have been constructed on the Blackfoot River in the past. The Missoulian reported in 1937, that the first dam was probably built on the Blackfoot in 1885 (Browman, 1974). No location is given. Presently the U. S. Army Corps of Engineers have proposed at least one dam site on the Blackfoot River. Although this proposal is in the planning stages preliminary public hearings were held in March, 1977 (Missoulian, 1977).

Non-commercial recreational use of the river has been increasing steadily as vehicle access to the river has been made more available. The Blackfoot River corridor between Johnsrud Park and the Ninemile Prairie was opened up to vehicles in the late 1950's when the Anaconda Company completed a road through this section for logging purposes. Johnsrud Park was the first developed public park within the study area. It was built in 1962 by the Blackfoot Valley Garden Club. Rafting has become very popular as a result of the post World War II boom of surplus rubber rafts (Nash, 1976). In more recent years an increasing regional population, greater interest in outdoor recreation, and a technology that has bettered recreation equipment have all

helped to dramatically increase recreational use on the Blackfoot River. Today, recreation ranks as one of the most important uses of the Blackfoot River.

## Recreational Resources

What makes the Blackfoot River a valuable recreation resource? First, it is readily accessible to the fastest growing population center in Western Montana. Second, its scenic beauty and the opportunity for many activities draw visitors from a large area. Third, parks in different stages of development provide access to the river and opportunities for camping, picnicking, and relaxation. Fast water, still water and rapids beckon to the casual floater, the swimmer, and the white water enthusiast. Excellent fisheries and wildlife resources provide hunting, fishing, and observation opportunities. The scenic beauty of the river, the surrounding forests, mountains, canyons and ranchlands attract the tourist and resident alike. Well developed road systems allow pleasure driving and sightseeing. Other areas of the river corridor are suitable for non-motorized uses such as hiking, ski touring and horseback riding.

## Seasonal Nature of Activities

There are great variations in the type of recreational activities pursued during the various seasons of the year on the Blackfoot River. To more fully understand the annual pattern of recreational use, a brief discussion of activity participation during each of the autumn, winter, spring and summer seasons follow.

The autumn use season follows the Labor Day weekend. After this weekend, use levels drop as summer vacations end, school begins and adverse weather normally occurs. Water levels are usually low so floating is impossible. The low water is favorable for fishermen however, and this activity is popular in the early fall (although not as prevalent as during the summer season). The archery season is the first of the big game hunting seasons and begins in mid-September. The opening dates for game birds, waterfowl and the general big game hunting season progress through October and by the end of November most hunting seasons close. Although most hunting is done out of the river corridor, some hunter related camping and fishing may occur on the river itself. Fishing remains open all year within the management area.

During the winter season, use levels drop even further. Snow and ice close many access roads and activity is limited primarily to those river sites which are accessible from the main highway. Winter fishing for whitefish is especially popular. Snowmobiling in suitable areas along the river is moderately popular. Of increasing importance along the river corridor are non-motorized winter sports such as ski-touring and snowshoeing, often with concurrent winter camping.

In the early spring, winter activities continue until the weather begins to warm. Sightseeing and pleasure driving increase with the warmer weather. As snowmelt causes the river to rise, high water and turbidity discourage all but the most avid fishermen. During the high water period river floating begins. Kayaks are often the first craft observed on the river in the spring. As water levels begin

to drop, rafts, inner tubes, and canoes appear. Rafts dominate spring-time river traffic on the Blackfoot. Outdoor parties and picnicking begin with warmer weather. The spring migration of birds makes bird-watching popular. Spring wildflowers attract the photographers and nature enthusiasts.

The summer season officially begins on the Fourth of July weekend and ends on the Labor Day weekend. The majority of total annual river related use occurs between these two holidays, which individually are the busiest peaks of the recreation season. Floating continues through July and into August depending on water levels. Camping and tourist pressure is heaviest during the summer season. Float-fishing is popular during the early part of this period as is bank fishing which begins in July after the water clears, and continues into August and September. Swimming and inner tubing become more prevalent later in the summer as the water becomes warmer. Organization picnics, outdoor parties, and other day use activities are commonly observed. Depreciative behavior, vandalism and vegetation damage by recreationists; and conflicts between the public and area landowners unfortunately also increase during this period.

The remainder of this report deals specifically with the information collected about the summer user and overall summer use patterns in 1976. This constitutes a description of the recreational use situation during the season of the year when the recreation management program is most important.

# CHAPTER III

# RESEARCH METHODOLOGY

The purpose of this chapter is to describe the experimental design and research procedures used in the study. This will enable managers to duplicate the study in future years, monitor potential changes in the nature of the visiting population, and modify the use estimation procedures.

## The Study Area

The study area is defined as that portion of the Blackfoot River for which the Conservation and Recreation Management Plan was implemented. Specifically this involves the approximate middle portion of the Blackfoot River, from Johnsrud Park upriver to the Missoula/Powell County line. Also included in the study area is the lower Clearwater River from the Harpers Lake Fishing Access site, downstream to the confluence with the Blackfoot River. The area on either side of the river that is included within the study area is shown on the accompanying map. This area corresponds to both legal and natural boundaries.

## The Study Population

Several types of people use the Blackfoot River study area. First, there are overnight campers that camp primarily in those areas

specifically designated for this activity. A second group involves day users that recreate along the entire river corridor within the study area. Within these two user group types are visitors from Missoula County, visitors from the remainder of the state of Montana, and out of state visitors.

For this investigation the study population consisted of visitors from each of these groups. The questionnaire study population was limited to those users 15 years of age and over. The season was defined as June 21 through September 22.

## Sampling Design

All visitors observed participating in any recreational activity within the study area became part of the sampling frame. Sampling was conducted on 42 days during the season[1] according to a predetermined schedule (see Appendix A). The river corridor was divided into 23 sections (see accompanying map) and each section was sampled 10 times according to the schedule. Sampling was conducted throughout each section and was dependent upon where visitors were located. During the period of the season from the Fourth of July weekend through the Labor Day weekend each researcher observed no less than two sections and not more than five on a given day. Two researchers were the maximum number during this period. After the Labor Day weekend,

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[1]Sampling was also conducted two days during the fall season. These days are included in Appendix A.

a larger number of sections were often observed on a given day. Only one researcher sampled users after the Labor Day weekend through the end of the season. Sampling was conducted for an eight hour period between 8:00 a.m. and 8:00 p.m. The times were varied for each section according to the schedule.

Because of the amount of time required on other phases of plan implementation, sampling did not begin until the end of July. Some summer activity groups, especially those related to river floating, therefore, may not be fairly represented in the sample.

## Questionnaire Design and Administration

The questionnaire itself (Appendix B) involves several sections. First, several socio-demographic characteristics were inventoried. Other questions were addressed to the trip context (size and type of group, length of trip, activity participation). Another section dealt with substitutability of areas and site use. Included in this section were questions dealing with perception of site use and facility development. A third section was concerned about the awareness on the part of users of efforts to manage recreation use. The final section involved visitor preferences for a managing agency and opinions concerning management programs.

Members of the sampling frame were asked by the researcher if they would cooperate in the study. They were told that this procedure normally took 10 to 15 minutes. If willing, one member of the group was asked to fill out a questionnaire. Unless a desire was expressed by several group members to fill out questionnaires, normally only the

one party member was asked to respond. Many factors influenced which individual in a particular group was asked to fill out a questionnaire. In addition, people had a tendency to elicit group answers or pass the questionnaire to someone else in the party to respond. It was found that in groups with both resident and non-resident users, the resident invariably filled out the questionnaire. This was mainly due to a perceived lack of knowledge about the area on the part of non-residents. In such cases, an attempt was made to sample both the resident and the non-resident. Because of the nature of the study design not all observed groups could be contacted. A concentrated effort was made to contact potential respondents either when they first arrived on the site or as they were preparing to leave. In most cases, groups were missed because of the care taken to minimize activity interruption on the part of the researcher. Groups were also missed when the researcher was talking with others, and when groups were at areas not easily reached. In addition to collecting information through the questionnaire, the researchers recorded all observed groups on a data sheet (Appendix C). Information collected on the data sheets revealed the gross sample size. Table 1 details the information concerning the gross and net sample size.[2]

Approximately 50 percent of the sampling frame was not sampled. While one may legitimately inquire about response bias, it should be

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[2]The study population consists of the users of interest in the study, i.e. those people who are the subject of the research. Since it is physically impossible to include each person in the study, we must take a sample of them. The sampling frame are all those Blackfoot River users which were observed during the days and hours the researcher was present. Since not all users falling within the sampling frame were actually contacted, the sample involves fewer numbers.

Table 1. Sample size for questionnaire study.

| | Gross Sampling Frame | Number Missed | Number of Refusals | Number Surveyed Previously | Net Sample Size | Percent of Gross[a] | Actual Number of Questionnairs[b] |
|---|---|---|---|---|---|---|---|
| Montana Residents | 730 | 308 | 30 | 52 | 340 | 54% | 377 |
| Out of State Residents | 230 | 97 | 13 | 24 | 96 | 52% | 98 |
| Total | 960 | 405 | 43 | 76 | 436 | 53% | 475 |

[a]Computation of this figure includes the net sample size plus the number surveyed previously.

[b]The difference between this figure and the net sample size reflects the fact that some groups filled out more than one questionnaire (up to four).

noted that about 90 percent of the sample not included was "missed." We assume that these misses are random and therefore inconsequential in terms of response bias. The refusals could be a problem, and might reflect a different group of visitors, but they constitute only about four percent of the sampling frame and therefore would not exert much influence on the data analysis. This small percentage of groups who refused to respond to the questionnaire did so for a variety of reasons. Some groups stated a desire to leave the questionnaire on site after finishing an activity or to mail it in. If they did neither, they were tabulated as refusals.

The 960 groups which make up the sampling frame involved a total of 2,505 individuals (of all ages). The 436 groups which were contacted and agreed to participate in the survey (and who provided 475 questionnaires) involved approximately 1,500 individuals.

Data obtained from the questionnaire and data sheets were coded, key punched on IBM cards, programmed through the Statistical Package for Social Sciences, and analyzed through the University of Montana Computer Center.

# CHAPTER IV

# DESCRIPTION OF THE BLACKFOOT RIVER USER

## Introduction

In the following section, the Blackfoot River user will be described in terms of socio-demographic, activity participation, preference and opinion variables.

The socio-demographic information inventoried for Blackfoot River users many have little direct utility for decision-making. However, it may assist recreation managers gain a background on the visitors using the river, and thus, in an indirect manner, help shape communication and education programs.

The information collected on activity participation patterns, user preferences, and user opinions do have direct relevance to decision-making. Inventory of activity participation patterns can help managers decide if some patterns or activities are inappropriate from the standpoint of river protection and recreation management objectives. Preference data can assist the manager in predicting the response on the part of users to future management actions or inactions. Finally, opinion data can help the manager design management programs which can be implemented with the least possible social disruption. All of the data collected about the river users can as well be helpful in supporting or disproving preconceived ideas upon which the Blackfoot River Conservation and Recreation Management Plan was originally based.

## Socio-Demographic Information

The questionnaire contained a number of fairly common items concerning the individual's background, including residence, community size, age, sex, income, occupation and education. All data summarized here, with the exception of residence, is a result of a questionnaire administered to a sample of Blackfoot River users, as defined in Chapter 3. Residence information was collected through both the questionnaire (for those groups that could be contacted) and through observation of license plates (for those groups that were not contacted). Both sets of residence data will be reported. Information is not available concerning individuals under 15 other than their relative proportion. Thus the information is not representative of that segment of the using population. While this group does represent a significant proportion of the total population, it is felt that the questionnaire is directed at an educational level beyond their present status. Furthermore, the data collected for this report is representative of users encountered only within the study area on the Blackfoot River in 1976. Reference to "the Blackfoot River user" implies this particular group only.

Residence, community size, age, sex, income, occupation, and education are shown in Tables 2 through 8, respectively. Occupation and education are reported for respondents' spouses as well (Tables 7 and 8). The data in Tables 3 through 8 have been tabulated by residence of the respondent: Montana resident or out of state visitor. This has been done because I suspect that for some variables there will be significant and perhaps managerially relevant differences between these two groups.

Table 2. Residence of Blackfoot River users, 1976, in percent.

| Residence of Users | Observation of License Plates (N=960) % | Questionnaires (N=475) % |
|---|---|---|
| Missoula County | 61.8 | 61.4 |
| Other Montana counties | 14.4 | 12.0 |
| Montana - no data on county | 0.0 | 6.1 |
| Total Montana Use | 76.1 | 79.5 |
| Out of State | 23.9 | 20.6 |
| Total | 100.0 | 100.0 |

Table 3. Community size in which Blackfoot River users reside by residence, 1976, in percent.

| Community Size Class | Residence of User[a] Montana Resident (N=366) % | Out of State Visitor (N=96) % | Total (N=462) % |
|---|---|---|---|
| Rural | 9.6 | 5.2 | 8.7 |
| Small town (under 2,500) | 4.4 | 6.3 | 4.8 |
| Large town (2,500-9,999) | 3.8 | 9.4 | 5.0 |
| Small city (10,000-99,999) | 82.2 | 36.4 | 72.7 |
| Large city (100,000 or over) | 0.0 | 42.7 | 8.9 |
| Total | 100.0 | 100.0 | 100.0 |

Missing cases = 13

[a]Differences statistically significant at the $\alpha = .05$ level.

Table 4. Age of Blackfoot River users by residence, 1976, in percent.

| Age Class | Residence of User[a] Montana Resident (N=376) % | Out of State Visitor (N=96) % | Total (N=472) % |
|---|---|---|---|
| 25 and younger | 31.1 | 33.3 | 31.6 |
| 26 - 39 | 37.8 | 22.9 | 34.7 |
| 40 and over | 31.1 | 43.8 | 33.7 |
| Total | 100.0 | 100.0 | 100.0 |

Missing cases = 3

[a]Differences statistically significant at the $\alpha = .05$ level.

Table 5. Sex of Blackfoot River users by residence, 1976, in percent.

| Sex | Residence of User Montana Resident (N=374) % | Out of State Visitor (N=96) % | Total (N=470) % |
|---|---|---|---|
| Male | 78.1 | 75.0 | 77.4 |
| Female | 21.9 | 25.0 | 22.6 |
| Total | 100.0 | 100.0 | 100.0 |

Missing cases = 5

Table 6. Income of Blackfoot River users by residence, 1976, in percent.

| Income Level | Residence of User: Montana Resident (N=365) % | Residence of User: Out of State Visitor (N=93) % | Total (N=449) % |
|---|---|---|---|
| Under $5,000 | 14.3 | 11.8 | 13.8 |
| $5,000-7,999 | 11.2 | 11.8 | 11.4 |
| $8,000-11,999 | 20.8 | 14.0 | 19.4 |
| $12,000-14,999 | 16.9 | 12.9 | 16.0 |
| $15,000-19,999 | 19.7 | 20.4 | 19.8 |
| $20,000 and over | 17.1 | 29.0 | 19.6 |
| Total | 100.0 | 100.0 | 100.0 |

Missing cases = 26

Table 7. Occupation of Blackfoot River users (respondent and spouse) by residence, 1976, in percent.[a]

| Occupation | Residence of User: Montana Resident Respondent[b] (N=363) % | Montana Resident Spouse (N=234) % | Out of State Visitor Respondent (N=92) % | Out of State Visitor Spouse (N=58) % | Total Respondent (N=455) % | Total Spouse (N=292) % |
|---|---|---|---|---|---|---|
| Agriculture | 3.9 | 1.7 | 4.3 | 1.7 | 4.0 | 1.7 |
| Professional | 33.1 | 30.8 | 40.2 | 36.2 | 34.5 | 31.8 |
| Clerical-Sales | 7.2 | 10.7 | 2.2 | 10.3 | 6.2 | 10.6 |
| Skilled | 18.5 | 10.3 | 12.0 | 5.2 | 17.1 | 9.2 |
| Semi-Skilled Unskilled Service | 16.0 | 8.5 | 6.5 | 0.0 | 14.1 | 6.8 |
| Housewife Retired | 13.7 | 35.9 | 19.6 | 44.8 | 14.9 | 37.7 |
| Other | 7.7 | 2.1 | 15.2 | 1.7 | 9.2 | 2.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Not Applicable[c] | 0 | 112 | 0 | 32 | 0 | 144 |
| Missing cases | 12 | 31 | 8 | 8 | 20 | 39 |

[a]The figures reported for the not applicable and missing cases categories are actual numbers.

[b]Differences statistically significant at the $\alpha = .05$ level.

[c]This category refers to those respondents not reporting a spouse (unmarried).

Table 8. Education of Blackfoot River users (respondent and spouse) by residence, 1976, in percent.[a]

| Education | Residence of User: Montana Resident Respondent (N=364) % | Montana Resident Spouse (N=253) % | Out of State Visitor Respondent (N=91) % | Out of State Visitor Spouse (N=63) % | Total Respondent (N=455) % | Total Spouse (N=316) % |
|---|---|---|---|---|---|---|
| Less than Grade School | 4.4 | 2.4 | 2.2 | 3.1 | 4.0 | 2.5 |
| Less than High School | 6.6 | 10.3 | 7.7 | 3.1 | 6.8 | 8.9 |
| High School Graduate | 34.1 | 38.7 | 22.0 | 39.7 | 31.6 | 38.9 |
| Some College | 24.5 | 23.3 | 28.6 | 20.6 | 25.3 | 22.8 |
| College Graduate | 16.2 | 17.4 | 23.1 | 20.6 | 17.6 | 18.0 |
| Post Graduate Work | 14.3 | 7.9 | 16.5 | 12.7 | 14.7 | 8.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Not Applicable[b] | 0 | 112 | 0 | 32 | 0 | 144 |
| Missing cases | 13 | 12 | 7 | 3 | 20 | 15 |

[a]The figures reported for not applicable and missing cases categories are actual numbers.

[b]This category refers to those respondents not reporting a spouse (unmarried).

Examination of the residence data (Table 2) reveals that Missoula County residents comprised over 60 percent of the total summer users found in the study area in 1976. Users from other Montana counties accounted for about 12-14 percent of the total summer use. Many of these users were from Western Montana counties other than Missoula, and they accounted for 70-85 percent of the other Montana county representation in the sample. Users from Cascade, Ravalli, Lewis and Clark, Silver Bow, Lake, Flathead, and Powell counties made up the bulk of Montana use outside of Missoula County.

Out of state users accounted for about 20 percent of the total summer use on the Blackfoot River and were largely concentrated in areas easily accessible from the highway. The majority of out of state users, in order of their numbers, were from the western states of Washington, California, Idaho, Oregon and Colorado. Wisconsin, New York, Illinois and Pennsylvania were the most represented eastern states. In all, 32 states, four Canadian provinces and two foreign countries were represented on the river during the summer of 1976.

Significant differences between Montana residents and out of state visitors were found for the following variables: community size, age, and respondent's occupation. In terms of community size, (Table 3), the proportion of rural and small city dwellers (the city of Missoula size class) is greater among Montana residents than for out of state visitors, and the proportion of large city dwellers is greater for out of state visitors than for Montana residents. In terms of age (Table 4), the proportion of older respondents (40 years and older) is greater among out of state visitors and the proportion of middle-aged respondents (26 years to 39 years) is greater among Montana residents.

Finally, Montana resident respondents have a greater tendency to be clerical/sales, skilled or semi-skilled/unskilled/service workers than out of state visitors (Table 7). Out of state visitors have a greater tendency to be professional, agricultural, housewife/retired, and "other" workers than do Montana residents.

## Trip Context

A number of variables were included in the study regarding the context within which the particular visit to the Blackfoot River took place during which the respondent was contacted, as well as past experiences on the river. The questionnaire addressed such variables as the length of visit to the Blackfoot, the group size, the age and sex of group members, the transportation mode used to visit the river, the method of camping (for overnight campers), the number of years using the river, activity participation, and the activity engaged in most. These data are shown in Tables 9 through 16. Observational data concerning the transportation mode used to visit the Blackfoot River is included with questionnaire results for the same variable in Table 12.

Almost 60 percent of the visits to the Blackfoot River in 1976 were one day outings (Table 9). A significant difference was found to exist between Montana residents and out of state visitors for this variable. The greater proportion of one day outings were made by Montana residents (64.7 percent) as compared to out of state visitors (38.5 percent). Out of state visitors accounted for a greater proportion of visits lasting greater than three days.

Table 9. Length of visit to the Blackfoot River by residence, 1976, in percent.

| Length of Visit | Residence of User[a] Montana Resident (N=373) % | Out of State Visitor (N=96) % | Total (N=469) % |
|---|---|---|---|
| One day outing | 64.7 | 38.5 | 59.3 |
| 2 - 3 days | 27.3 | 24.0 | 26.7 |
| 4 - 7 days | 4.3 | 19.8 | 7.5 |
| Longer than 7 days | 3.8 | 17.7 | 6.6 |
| Total | 100.0 | 100.0 | 100.0 |

Missing cases = 6

[a]Differences statistically significant at the $\alpha = .05$ level.

Table 10. Group size of Blackfoot River study respondents by residence, 1976, in percent.

| Group Size[a] | Residence of User Montana Resident (N=377) % | Out of State Visitor (N=97) % | Total (N=474) % |
|---|---|---|---|
| 1 - 2 | 45.1 | 50.6 | 46.2 |
| 3 - 5 | 45.9 | 42.2 | 45.1 |
| 6 - 10 | 7.2 | 7.2 | 7.2 |
| 11 - 20 | 1.3 | 0.0 | 0.4 |
| 21 or more | 0.5 | 0.0 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 |

Missing cases = 1

[a]Average group size = 3.26 people

Table 11. Age of group members with respondents in Blackfoot River study by sex, 1976, in percent.[a]

| Age Class | Sex of Group Members[b] Male (N=573) % | Female (N=474) % | Total (N=1047) % |
|---|---|---|---|
| 14 and younger | 32.2 | 25.1 | 29.0 |
| 15 - 25 | 27.9 | 26.8 | 27.4 |
| 26 - 39 | 24.3 | 24.3 | 24.3 |
| Over 40 | 15.3 | 23.8 | 19.3 |
| Total | 100.0 | 100.0 | 100.0 |

[a]Does not include the respondents.

[b]Differences statistically significant at the $\alpha = .05$ level.

Table 12. Transportation mode used by Blackfoot River users to visit the river, by residence, 1976, in percent.

| Transportation Mode[a] | Residence of Users: Questionnaire — Montana Residents (N=375) % | Questionnaire — Out of State Visitors (N=96) % | Questionnaire — Total (N=471) % | Observations — Montana Residents (N=728) % | Observations — Out of State Visitors (N=228) % | Observations — Total (N=956) % |
|---|---|---|---|---|---|---|
| Passenger Car | 44.5 | 55.2 | 46.7 | 47.5 | 50.4 | 48.2 |
| Pickup Truck | 40.3 | 19.8 | 36.1 | 19.6 | 5.3 | 16.2 |
| Pickup Truck with Camper[b] | ---- | ---- | ---- | 9.5 | 11.0 | 9.8 |
| Pickup Truck with Campershell[c] | ---- | ---- | ---- | 12.0 | 10.5 | 11.6 |
| Motorcycle | 0.0 | 2.1 | 0.4 | 0.3 | 0.9 | 0.4 |
| Recreational Vehicle[d] | 14.9 | 21.9 | 16.3 | 1.9 | 5.3 | 2.7 |
| Vans - Buses | ---- | ---- | ---- | 8.5 | 12.3 | 9.4 |
| Bicycle | 0.0 | 1.0 | 0.2 | 0.0 | 0.4 | 0.1 |
| Walked | 0.3 | 0.0 | 0.2 | 0.6 | 3.5 | 1.3 |

Table 12. Continued - Transportation mode used by Blackfoot River users to visit the river, by residence, 1976, in percent.

| Transportation Mode[a] | Residence of Users: Questionnaire — Montana Residents (N=375) % | Questionnaire — Out of State Visitors (N=96) % | Questionnaire — Total (N=471) % | Observations — Montana Residents (N=728) % | Observations — Out of State Visitors (N=228) % | Observations — Total (N=956) % |
|---|---|---|---|---|---|---|
| Horseback | ---- | ---- | ---- | 0.0 | 0.4 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

[a]The questionnaire respondents were limited to the following choices: passenger car, pickup truck, recreational vehicle, motorcycle, and other. The "other" category was used by respondents to indicate either walking or bicycling, so the "other" category was eliminated during data analysis in favor of these categories. The observational data collected by the researchers was more specific in terms of travel modes, thus the use of more categories for this data.

[b]The term camper is meant to imply a unit which is placed in a pickup truck bed and is equipped for eating and sleeping.

[c]The term campershell refers to a similar unit as camper, but which is not equipped for uses described above.

[d]This category was used to describe many different types of vehicles by the questionnaire respondents, but was limited to Winnebago-type units in the observational data.

Table 13. Method of camping for those respondents indicating a length of visit to the Blackfoot River exceeding a one day outing by residence, 1976, in percent.

| Camping Style | Residence of User: Montana Resident (N=129) % | Residence of User: Out of State Visitor (N=53) % | Total (N=182) % |
|---|---|---|---|
| No shelter | 9.3 | 13.2 | 10.4 |
| Tent or Tent Trailer | 31.8 | 39.6 | 34.1 |
| Trailer | 26.4 | 18.9 | 24.2 |
| Equipped Pickup Camper | 26.4 | 18.9 | 24.2 |
| Pickup Campershell | 3.1 | 1.9 | 2.7 |
| Other | 3.1 | 7.5 | 4.4 |
| Total | 100.0 | 100.0 | 100.0 |

Table 14. Amount of previous experience on the Blackfoot River by residence, 1976, in percent.

| Previous Experience (in years) | Residence of User[a] Montana Resident (N=377) % | Out of State Visitor (N=95) % | Total (N=472) % |
|---|---|---|---|
| First Year | 23.3 | 55.8 | 29.9 |
| 2 - 5 | 20.7 | 9.5 | 18.4 |
| 7 - 9 | 22.0 | 7.4 | 19.1 |
| 10 - 15 | 15.9 | 6.3 | 14.0 |
| Over 15 | 18.0 | 21.1 | 18.6 |
| Total | 100.0 | 100.0 | 100.0 |

Missing cases = 3

[a]Differences statistically significant at the $\alpha = .05$ level.

Table 15. Participation in selected recreational activities by Blackfoot River users by residence, 1976, in percent.

| Activity | Residence of User: Montana Resident (N=377) % | Out of State Visitor (N=96) % | Total (N=473) % |
|---|---|---|---|
| Sightseeing | 28.4 | 38.5 | 30.4 |
| Rest, relaxation | 51.7 | 53.1 | 52.2 |
| Pleasure driving | 22.0 | 25.0 | 22.6 |
| Motorcycling | 6.9 | 2.1 | 5.9 |
| Picnicking[a] | 51.7 | 32.3 | 48.0 |
| Playing Outdoor Games | 10.6 | 6.3 | 9.7 |
| Wildlife Viewing | 17.5 | 17.7 | 17.5 |
| Mushroom or Berry Gathering[a] | 15.4 | 3.1 | 12.9 |
| Rock Hunting | 13.0 | 8.3 | 12.1 |
| Photography | 20.7 | 29.2 | 22.4 |
| Walking, hiking | 32.9 | 38.5 | 34.0 |
| Bicycling | 2.9 | 3.1 | 3.0 |
| Horseback riding | 1.9 | 3.1 | 3.0 |
| Camping | 50.4 | 43.8 | 49.0 |
| Swimming | 37.4 | 33.3 | 36.6 |
| Rafting | 28.6 | 12.5 | 25.4 |
| Canoeing | 9.8 | 5.2 | 8.9 |
| Kayaking | 3.2 | 1.0 | 2.7 |
| Fishing[a] | 82.8 | 70.8 | 80.5 |
| Hunting[a] | 18.6 | 2.1 | 15.2 |
| Ski touring | 4.5 | 0.0 | 3.6 |
| Snowshoeing | 4.8 | 0.0 | 3.8 |
| Snowmobiling | 2.7 | 0.0 | 2.1 |
| Other | 2.7 | 2.1 | 2.5 |

Missing cases = 2

[a]Differences are statistically significant at the $\alpha = .05$ level.

Tables 10 and 11 deal specifically with the size and composition of groups using the Blackfoot River. The size of the group did not vary considerably between Montana residents and out of state visitors, although residents accounted for all groups exceeding 10 people. Young males (under 14) accounted for a greater proportion in groups than young females (Table 11). Older females (over 40) accounted for a greater proportion in groups than older males. This may reflect the fact that older males were more willing to respond to the questionnaire, and thus their numbers would not be reflected in Table 11.

Table 12 shows the mode of transportation which visitors used to reach the Blackfoot River in 1976. Passenger cars carried about 50 percent of the users to the river. Montana residents were more likely to arrive on the Blackfoot River in pickup trucks while out of state visitors were more likely to arrive in a passenger car or recreational vehicle.

Almost 35 percent of the campers on the Blackfoot River used tents in 1976, as their primary camping shelter (Table 13). Trailers and equipped pickup campers each accounted for 25 percent of the total.

Of the visitors encountered on the river in 1976, 30 percent were using the river for their first year (Table 14). In terms of residence, the proportion of first year users was greater among out of state visitors than for Montana residents and the proportion of long time users (over 15 years) shows a similar relationship.

Users were also asked to indicate their participation in 23 recreational activities. As shown in Table 15, there were some

similarities as well as differences between Montana residents and out of state visitors. The most popular activity was fishing. It was observed that for some groups this was the primary activity, but most others combined fishing with other recreational pursuits. Fishermen were observed along every stretch of the Blackfoot River virtually every daylight hour, every day of the summer, except when weather conditions absolutely prevented this activity. The next most popular activity was relaxation, and following that camping and picnicking. Other important activities, in terms of popularity, were (in order of preference) swimming, hiking, sightseeing, rafting, pleasure driving and photography. Activities listed in Table 15 lying below those activities listed above are popular with less than 20 percent of the users. Significant statistical differences were found for the following activities: picnicking, mushroom or berry gathering, rafting, fishing and hunting. Participation in all of these activities were proportionally higher among Montana residents than among out of state visitors. Except for picnicking, the lack of the necessary equipment and the lack of knowledge of the area might discourage the casual out of state traveller from participating in these activities.

Although not reported in a table, significant differences were found to exist between some activities and the age and sex varibles. Briefly, those relationships are reported. All differences are significant at the $\alpha = .05$ level. Activities found related to sex were hiking, swimming, rock hunting, relaxation, picnicking and fishing. A greater proportion of men were found to participate in fishing as compared to women. The opposite relationship was found to be true for

the activities of hiking, swimming, rock hunting, relaxation and picnicking. It is interesting to note that hunting (usually thought of as a male dominated activity) was not found to be the exclusive domain of males on the Blackfoot River, according to the sample.

Activities found to be related to age included swimming, hiking, fishing, rafting, relaxation, wildlife viewing, motorbiking, snowshoeing and picnicking. Fishing was participated in by a greater proportion of older aged users than younger users. Picnicking and motorbiking was popular with the 26-39 age class as compared to the proportion of younger and older users. Participation of the younger age classes was proportionally more than the older age classes for the remaining activities.

In terms of the location of participation in popular activities listed in Table 15, the following information is a summary of observational data collected by the researchers.

Camping use remains high (about 50 percent of all respondents indicated participation in this activity) despite restrictions placed on unlimited corridor camping last summer. Camping along the river was allowed only in established public campgrounds (of which there were three on the Blackfoot River and two on the lower Clearwater River). I suspect that camping would be of even greater significance if more campgrounds were provided.

Picnicking occurs virtually everywhere in the corridor. Swimming, on the other hand, was restricted to particular areas where the water and beach conditions made this activity desirable and safe. Areas of white water were seldom used for this activity. Hiking and

photography were two activities that were usually undertaken as the result of participation in another primary activity. Fishermen normally hiked to their "fishing hole" and tourists often carried their camera along when using the river. Hiking, for the sake of hiking, was further restricted by the lack of developed trails within the corridor.

River floating was a very popular summer activity although the majority of participation in this activity occurs in the spring soon after high water flows begin to drop. Floating participation (rafting, canoeing, kayaking) as portrayed in Table 15, is misleading as the data were collected after the most popular period of spring floating. Floating activity peaked during the month of May in 1976. The month was unusually hot and dry. June was generally cooler and wetter than normal and by the end of July water levels were low enough to discourage all but the most persistent floaters.

River floating on the Blackfoot is done in a number of different crafts. Rubber rafts were the most popular, and on spring weekends more than forty rafts were observed either embarking at or passing the River Bend Campground. Rafting occurred throughout the corridor and was often done in conjunction with fishing. Although inner tubing was also fairly popular within the management area, more of this activity occurred from Johnsrud Park downstream. I believe that the severity of some rapids within the management area precluded intensive tubing. Canoeists and kayakers appear to be steadily increasing on the Blackfoot River. Although both groups used the entire river, it was not unusual to see kayakers float a particular set of rapids many times

in succession. The most popular rapids are rated as class II and III.[3] These rapids are located on the Blackfoot upstream from the confluence with the Clearwater, the Clearwater River canyon between Salmon and Elbow lakes, the rapids at the Roundup access site, rapids downstream from this site, and those at Thibodeau, downstream from Whitaker Bridge. Float related camping trips were also increasingly popular, but illegal camping, trespass and firebuilding on private land was a problem in many areas.

Other activities listed in Table 15 were minor in summer participation in 1976. The participation data presented for four activities; snowmobiling, snowshoeing, ski touring, and hunting is misleading because of the seasonal nature of these activities. Participation rates for these activities would be higher if the data were collected during the seasons that these activities are popular.

Respondents to the questionnaire were also asked to indicate which activity they engaged in most on the Blackfoot River (Table 16). The data reveal that fishing was by far the most engaged in activity by individual river users. The proportion of users indicating camping as the most engaged in activity was second to fishing but much lower in percentage. Camping was followed by relaxation and rafting. The proportions of other activities were very low in terms of most frequent engagement of that particular recreational activity on the river.

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[3]Based on a scale of difficulty of I to VI (Jenkinson, 1973).

Table 16. Activity engaged in most by Blackfoot River users by residence, 1976, in percent.

| Activity | Residence of User: Montana Resident (N=208) % | Out of State Visitor (N=67) % | Total (N=275) % |
|---|---|---|---|
| Sightseeing | 0.5 | 0.0 | 0.4 |
| Rest, relaxation | 6.7 | 7.5 | 6.9 |
| Pleasure driving | 0.5 | 0.0 | 0.4 |
| Picnicking | 4.8 | 1.5 | 4.0 |
| Mushroom or Berry gathering | 0.5 | 0.0 | 0.4 |
| Photography | 0.5 | 4.5 | 1.5 |
| Walking, hiking | 1.0 | 4.5 | 1.8 |
| Bicycling | 0.0 | 1.5 | 0.4 |
| Camping | 10.1 | 4.5 | 8.7 |
| Swimming | 3.4 | 6.0 | 4.0 |
| Rafting | 4.8 | 3.0 | 4.4 |
| Canoeing | 1.4 | 0.0 | 1.1 |
| Kayaking | 1.4 | 0.0 | 1.1 |
| Fishing | 62.5 | 67.2 | 63.6 |
| Hunting | 1.0 | 0.0 | 0.7 |
| Ski touring | 1.0 | 0.0 | 0.7 |

## Preferences and Perceptions

Another area of concern dealing with Blackfoot River users are their preferences and perceptions concerning a number of variables. Specifically, information was collected concerning where the users would seek similar experiences should the Blackfoot River be closed to public use, the suitability of these areas to the user's recreational interests, use of more than one site on the river, the respondent's favorite site on the Blackfoot River, user perception of crowding, user preference for facility development and preference for an ultimate recreation managing agency. These data are shown in Tables 17 through 24.

The majority of users indicated that if the Blackfoot River were not available for recreational activities, they would turn to other rivers for experience satisfaction (Table 17). The seven areas named most as a substitute for the Blackfoot were the Bitterroot River, Clark Fork River, Rock Creek, Swan River, Flathead Lake, Fish Creek and the Missouri River. All of these resources lie in western Montana with the exception of the Missouri River (a recent addition to the National Wild and Scenic River System). Asked whether these substitute areas are as suitable for their recreational interests as the Blackfoot River, 56.4 percent of the respondents replied yes, and 43.6 percent replied no (Table 18). A greater percentage of Montana residents indicated that these other areas are not as suitable as the Blackfoot River is for their recreational interests.

Not surprisingly, Table 19 reveals that resident users were more likely to use a number of different sites along the river than

Table 17. Areas named by Blackfoot River users as a possible substitute for the Blackfoot River if it were not available for recreation activities by residence, 1976, in percent.

| Substitute Areas | Residence of Users: Montana Resident (N=310) % | Out of State Visitor (N=52) % | Total (N=362) % |
|---|---|---|---|
| Bitterroot River | 28.4 | 11.5 | 26.0 |
| Clark Fork River | 24.8 | 9.6 | 22.7 |
| Rock Creek | 10.6 | 5.8 | 9.9 |
| Swan River | 6.8 | 3.8 | 6.4 |
| Flathead Lake | 3.5 | 1.9 | 3.3 |
| Fish Creek | 2.3 | 5.8 | 2.8 |
| Missouri River | 2.9 | 0.0 | 2.5 |
| Other areas in Montana | 42.9 | 42.3 | 42.8 |
| Areas outside of Montana | 3.5 | 38.5 | 8.6 |

Table 18. Perceptions as to the suitability of areas named by users as substitutes for the Blackfoot River, to provide for their recreational interests as compared to the Blackfoot River by residence, 1976, in percent.

| Suitability | Residence of Users: Montana Resident (N=314) % | Out of State Visitor (N=62) % | Total (N=376) % |
|---|---|---|---|
| As suitable | 53.8 | 69.4 | 56.4 |
| Not as suitable | 46.2 | 30.6 | 43.6 |
| Total | 100.0 | 100.0 | 100.0 |

Table 19. Use of more than one site on the Blackfoot River by users by residence, 1976, in percent.

| Use of More Than One Site | Residence of Users[a]: Montana Resident (N=347) % | Out of State Visitor (N=85) % | Total (N=432) % |
|---|---|---|---|
| No | 26.8 | 62.4 | 33.8 |
| Yes | 73.2 | 37.6 | 66.2 |
| Total | 100.0 | 100.0 | 100.0 |

Missing cases = 43

[a]Differences statistically significant at the $\alpha = .05$ level.

Table 20. Favorite site named by Blackfoot River users by residence, 1976, in percent.[a]

| Favorite Site | Residence of Users: Montana Resident (N=167) % | Residence of Users: Out of State Visitor (N=18) % | Total (N=185) % |
|---|---|---|---|
| Johnsrud Park | 8.9 | 0.0 | 8.0 |
| Harper Lake FAS | 7.7 | 16.6 | 8.0 |
| Red Rock Flat Area | 5.9 | 0.0 | 5.9 |
| Ninemile Prairie Area | 5.3 | 5.5 | 5.3 |
| Clearwater-Blackfoot Confluence | 4.7 | 11.1 | 5.3 |
| River Bend | 4.7 | 5.5 | 4.8 |
| Belmont Creek | 4.7 | 0.0 | 4.3 |
| Scotty Brown Bridge | 3.0 | 5.5 | 3.2 |
| Other sites | 55.1 | 55.8 | 57.2 |
| Total | 100.0 | 100.0 | 100.0 |

[a]The data displayed in this table is strongly related to where the respondent was contacted. Thus, it is not surprising that the two areas where the most questionnaire respondents were contacted (Johnsrud Park and Harpers Lake) were also the most frequently named favorite sites.

Table 21. Perception of crowding by Blackfoot River users by residence, 1976, in percent.

| Perception of Crowding | Residence of Users[a] Montana Resident (N=369) % | Out of State Visitor (N=93) % | Total (N=462) % |
|---|---|---|---|
| Too Crowded | 27.6 | 12.9 | 24.7 |
| Just Right | 69.6 | 81.7 | 72.1 |
| Not Used Enough | 2.7 | 5.4 | 3.2 |
| Total | 100.0 | 100.0 | 100.0 |

Missing cases = 13

[a]Differences statistically significant at the $\alpha = .05$ level.

Table 22. Perception of crowding by Blackfoot River users by time period, 1976, in percent.

| Perception of Crowding | Time Period Before Sept. 3 (N=320) % | Labor Day Weekend (N=64) % | After Sept. 6 (N=76) % | Total (N=462) % |
|---|---|---|---|---|
| Too Crowded | 23.4 | 29.7 | 25.0 | 24.7 |
| Just Right | 73.4 | 67.2 | 71.1 | 72.1 |
| Not Used Enough | 3.1 | 3.1 | 3.9 | 3.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

Table 23. Facility development preference of Blackfoot River users by residence, 1976, in percent.

| Facility Development | Residence of Users: Montana Resident (N=362) % | Out of State Visitor (N=94) % | Total (N=456) % |
|---|---|---|---|
| More Facility Development | 13.5 | 9.6 | 12.7 |
| Left as is | 86.5 | 90.4 | 87.3 |
| Total | 100.0 | 100.0 | 100.0 |

Table 24. Preference for a recreation management agency by Blackfoot River users by residence, 1976, in percent.

| Recreation Management Agency | Residence of Users: Montana Resident (N=335) % | Out of State Visitor (N=75) % | Total (N=410) % |
|---|---|---|---|
| Missoula County | 43.0 | 34.7 | 41.5 |
| State of Montana | 63.9 | 64.0 | 63.9 |
| Federal Government | 14.9 | 10.7 | 14.1 |

were non-resident users. Sites lying outside of the study area which were most frequently named by respondents were the Bonner weigh station area, Lafray Creek Wayside Nook, Wisherd Bridge, Angelvine Rest Area, Rainbow Bend, McNamara Bridge, Scotty Brown's Bridge, Box Canyon, River Junction Fishing Access Site, North Fork of the Blackfoot River, the Ovando area, the Blackfoot Canyon (between Lincoln and the Helmville turnoff from Highway 200) and the Lincoln area. Users were also asked to indicate their favorite site on the Blackfoot River (Table 20). The most frequently named sites, by users contacted within the study area were Johnsrud Park, Harpers Lake, Red Rock Flat area, Ninemile Prairie area, Clearwater-Blackfoot confluence, River Bend campground, Belmont Creek and Scotty Brown's Bridge.

Table 21 shows that the perception of relative site use levels was likely to be more critical on the part of residents than on the part of non-residents. The data reveal that 27.6 percent of the residents indicated that the site they were contacted at was too crowded while only 12.9 percent of the non-residents indicated this. On the other hand, 5.4 percent of the non-residents felt the site to be under used while only 2.7 percent of the residents felt this way. Naturally, the perception of site use was influenced by the time of day, day of week, the time period during the summer (Table 22) and the site on which the respondent was contacted (Table 36 in Appendix D). Over the Labor Day weekend, the percentage of visitors indicating "too crowded" was above the percentage for either before or after this holiday (Table 22).

A surprising finding was that a greater percentage of residents indicated that more facility development was desirable along the river

corridor than did non-residents (Table 23). Examination of the data reveal that 13.5 percent of all residents indicated "more facility development," and only 9.6 percent of all non-residents checked this category. Users felt that such things as restrooms, drinking water, and garbage cans should be provided.

Users were asked on the questionnaire to indicate what level(s) of government they felt should provide recreation management assistance such as site development and administration to those private landowners along the Blackfoot River who allowed the public to use their land for recreational purposes (Table 24). This information reflects the degree to which the users felt a particular governmental level was equipped to administer a project of this nature. The level of government most favored by users to provide recreation management assistance was the state of Montana with 63.9 percent. The county of Missoula was favored by 41.5 percent and the federal government by 14.1 percent of the users. Montana residents were slightly more favorable towards Missoula County and the federal government than were non-residents.

## Awareness of Recreation Management Efforts

The Blackfoot River Conservation and Recreation Management Plan was implemented after a considerable amount of publicity in the local Missoula news media. However, I suspected that a certain percentage of river users would remain uninformed about such efforts so the questionnaire was used to test this assumption. This section is devoted to data collected about the users concerning their knowledge of recreation management efforts on the Blackfoot River, the information

Table 25. Awareness on the part of Blackfoot River users of efforts to manage recreation use on the Blackfoot River by residence, 1976, in percent.

| Awareness | Residence of Users[a] Montana Resident (N=367) % | Out of State Visitor (N=90) % | Total (N=457) % |
|---|---|---|---|
| Yes | 35.4 | 20.0 | 32.4 |
| No | 64.6 | 80.0 | 67.6 |
| Total | 100.0 | 100.0 | 100.0 |

Missing cases = 18

[a]Differences statistically significant at the $\alpha = .05$ level.

Table 26. Source of information concerning efforts to manage recreation use through which Blackfoot River users were informed by residence, 1976, in percent.

| Source of Information | Residence of Users[a] Montana Resident (N=125) % | Out of State Visitor (N=17) % | Total (N=142) % |
|---|---|---|---|
| Friends | 44.8 | 41.0 | 44.4 |
| Radio | 1.6 | 0.0 | 1.4 |
| Television | 0.8 | 0.0 | 0.7 |
| Newspaper | 36.0 | 5.9 | 32.4 |
| Official Source | 13.6 | 41.2 | 16.9 |
| Other | 3.2 | 11.8 | 4.2 |
| Total | 100.0 | 100.0 | 100.0 |

[a]Differences statistically significant at the $\alpha = .05$ level.

Table 27. Blackfoot River user opportunity to read the Blackfoot Plan by residence, 1976, in percent.

| Opportunity to Read the Plan | Residence of User: Montana Resident (N=366) % | Residence of User: Out of State Visitor (N=90) % | Total (N=456) % |
|---|---|---|---|
| Yes | 9.0 | 2.2 | 7.7 |
| No | 91.0 | 97.8 | 92.3 |
| Total | 100.0 | 100.0 | 100.0 |

sources which were most effective in terms of informing users, and the degree to which the plan had been reviewed by individual users. These data are displayed in Tables 25 through 27.

Efforts to inform the Blackfoot user of recreation management programs prior to their arrival in the area were less than completely successful. Despite numerous newspaper and radio announcements, only 32.4 percent of the respondents knew of the formalized effort to manage recreational use on the Blackfoot River (Table 25). Naturally, a greater proportion of Montana residents (35.4 percent) were aware of efforts to manage recreational use than were out of state visitors (20.0 percent). More visitors were uninformed at the beginning of the summer than at the end of the season. Table 26 reveals that the most effective means of information dissemination were friends (44.4 percent), the newspapers (32.4 percent) and official sources (16.9 percent). Official sources were defined as someone involved with the project. A greater proportion of out of state visitors (41.2 percent) were made aware of management efforts through official sources than were Montana residents (13.6 percent). A greater proportion of Montana residents (36.0 percent) were made aware of management efforts through the newspaper than were out of state visitors (5.9 percent). Only a total of 7.7 percent of the Blackfoot users had read the plan (Table 27). The proportion of Montana residents who read the plan was higher (9.0 percent) than the proportion of out of state visitors (2.2 percent).

## Recreation Management Opinions

The final area in which data was collected about Blackfoot River users, concerned opinions they held in regards to management programs. A scale was used to test the users opinions as they related to 13 management programs which had been discussed by the Advisory Board. Some of these programs were implemented in 1976, and others were simply discussed pending the collection of user opinion data concerning these programs. Finally, three open-ended questions allowed the respondents to list what they felt were good aspects and bad aspects of recreation management programs implemented in 1976, and the recommendations they would make in regards to the future management of recreation use on the Blackfoot River. These data are displayed in Tables 28 through 31.

For the 13 opinion statements, the respondent was asked to indicate the extent to which they agreed with each statement by writing (1) strongly disagree, (2) disagree, (3) agree, (4) strongly agree, or (5) no opinion. Each possible response found in this section of the questionnaire was assigned a weighted value for the purpose of ascertaining a weighted response index value for each statement. The numerical values assigned each response were:

strongly agree - 4 points
tend to agree - 3 points
tend to disagree - 2 points
strongly disagree - 1 point
no opinion - 0 points

The number of like responses in each category was then multiplied by the appropriate weight, and the numbers averaged to obtain the weighted response index for each statement. It should be noted, for calculation purposes, that "no opinion" was given a weighted value of 0 points. Therefore, those Blackfoot users who selected "no opinion" as a response were not included in the calculation of the weighted response index.

The following scale was empirically derived for the purpose of interpreting the weighted response index:

strongly agree - 3.50-4.00

tend to agree - 2.50-3.49

tend to disagree - 1.50-2.49

strongly disagree - 1.49 and below

The statements on the questionnaire were as follows:

1. Private landowners along the Blackfoot River should charge a fee directly to the public to use their lands for recreational purposes.
2. Overnight camping along the Blackfoot River should be restricted to established public campgrounds.
3. In campgrounds, camping units should park at least 100 feet away from the river so as to allow everyone to use the beach area.
4. The number of presently designated overnight camping areas are adequate for this stretch (Johnsrud Park upriver to the county line) of the Blackfoot River.
5. Law enforcement patrol in established campgrounds along the Blackfoot River is adequate.

6. The signs used to designate overnight camping areas are adequate in terms of orienting the users to these areas.
7. The river corridor users should be responsible for packing out their own garbage.
8. Access to the Blackfoot River, above Johnsrud Park to the Missoula-Powell County line, is adequate.
9. The Blackfoot River, above Johnsrud Park and below the Missoula-Powell County line, should be preserved in its present condition.
10. Parts of the Blackfoot River corridor should be accessible only by non-motorized means (i.e. horseback, foot travel, skiis, etc.).
11. The Sunset Hill road below the Clearwater River to the bottom of the Sunset Hill should be closed.
12. Some floaters interrupt fishermen when they float by.
13. A "fly fishing" only segment of the Blackfoot River would be desirable.

Inspection of Table 28 reveals that there were no statements which received a weighted response index rating which fell in the categories of either 3.50 to 4.00 or 1.49 and below. Thus, the Blackfoot River users, as a whole, did not strongly agree or strongly disagree with any of the statements.

Further examination of Table 28 reveals that sizeable percentages of users had no opinion or did not respond to particular statements. This lack of definitive response may have been due to either the specific nature of some statements, or to the length of the questionnaire. Generally, the proportion of out of state visitors was greater in the "no opinion" and "no response" categories as compared to Montana residents.

Table 28. Weighted opinions of Blackfoot River users concerning management programs, 1976.

| Opinion Statement[a] | SD | | D | | A | | SA | | NO | | No Response Given | Weighted Response |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | n | %[b] | n | % | n | % | n | % | n | %[c] | | |
| 1 | 161 | 43.3 | 154 | 41.4 | 49 | 13.2 | 8 | 2.2 | 62 | (14.3) | 41 | 1.74 |
| 2 | 84 | 20.4 | 126 | 30.7 | 131 | 31.9 | 70 | 17.0 | 27 | (6.2) | 37 | 2.43 |
| 3 | 13 | 3.1 | 37 | 8.9 | 242 | 57.9 | 126 | 30.1 | 22 | (5.0) | 35 | 3.15 |
| 4 | 39 | 13.0 | 101 | 33.7 | 125 | 41.7 | 35 | 11.7 | 129 | (30.1) | 46 | 2.52 |
| 5 | 11 | 4.6 | 56 | 23.4 | 145 | 60.7 | 27 | 11.3 | 190 | (44.3) | 46 | 2.79 |
| 6 | 4 | 1.2 | 59 | 17.5 | 253 | 75.1 | 21 | 6.2 | 92 | (21.4) | 46 | 2.86 |
| 7 | 10 | 2.4 | 29 | 6.8 | 153 | 36.0 | 233 | 54.8 | 17 | (3.8) | 33 | 3.43 |
| 8 | 16 | 4.9 | 58 | 17.9 | 201 | 62.0 | 49 | 15.1 | 104 | (24.3) | 47 | 2.87 |
| 9 | 5 | 1.4 | 22 | 6.1 | 191 | 52.6 | 145 | 39.9 | 68 | (15.8) | 44 | 3.31 |
| 10 | 15 | 3.8 | 48 | 12.2 | 168 | 42.9 | 161 | 41.1 | 44 | (10.1) | 39 | 3.21 |
| 11 | 52 | 34.4 | 78 | 51.7 | 10 | 6.6 | 11 | 7.3 | 254 | (62.7) | 70 | 1.87 |
| 12 | 47 | 15.3 | 148 | 48.2 | 92 | 30.0 | 20 | 6.5 | 118 | (27.8) | 50 | 2.28 |
| 13 | 71 | 22.5 | 127 | 40.3 | 73 | 23.1 | 44 | 14.0 | 113 | (26.4) | 47 | 2.29 |

[a]Refer to statements listed on pages 56 and 57.

[b]Percentage of respondents providing an opinion in the SD, D, A, and SA categories.

[c]Percentage of total respondents providing an opinion in the "no opinion" category.

The opinion statements receiving an "agree" weighted response, presented in descending order, were as follows:

Statement 7. The river corridor users should be responsible for packing out their own garbage. This approach to the garbage problem was initiated last summer in order to reduce maintenance costs. The program was accepted very well by the public as is evident from the high response score (3.43). Most access areas remained exceptionally clean as a result of both the pack out program and also because concerned users picked up trash left by the minority of careless campers. Numerous old garbage dumps which should be cleaned up still remain along the river, however. Community clean up projects can alleviate this problem and attract favorable publicity to the Blackfoot River project as well.

Statement 9. The Blackfoot River, above Johnsrud Park to the Missoula-Powell County line, should be preserved in its present condition. This statement also received a high response score (3.31) and illustrates that users feel the Blackfoot River is a valuable recreation resource that should be preserved. Some of the users who disagreed with this statement said that they would like to see the river corridor preserved as it was in the past, without the present level of development that exists today.

Statement 10. Parts of the Blackfoot River corridor should be accessible only be non-motorized means (i.e. horseback, foot travel, skiis, etc.). The response score for this statement (3.21) indicates that users feel that some areas along the river should be maintained for non-motorized travel only. This would seem to support the continued closure of the area southeast of Whitaker Bridge, the Lubrecht Forest,

and the Conservation Reserve upstream from the Clearwater-Blackfoot confluence. Users beyond the age of 39 generally disagree with this statement. These people feel that many of their favorite areas are no longer available to them because of the long walk required to reach the site.

Statement 3. In campgrounds, camping units should park at least 100 feet away from the river so as to allow everyone to use the beach area. This statement refers to a problem that occurs in all campgrounds on the river corridor. Resource damage from vehicles driven into the riverbed, and social conflicts resulting from people hoarding the water front prompted this statement. The score (3.15) indicates that users feel the beach should be available to all.

Statement 8. Access to the Blackfoot River, above Johnsrud Park to the Missoula-Powell County line is adequate. Users in general agreed with this statement (2.87) but older visitors tended to disagree. The negative response again is related to the hiking capability of the older people. In this respect they feel that direct access to the river has been limited. Parking restrictions, road closures and difficult topography all contribute to the general feeling by the older user that access is inadequate. Many older users feel that they are being systematically forced off some of their favorite areas by restrictions placed on their mobility. The present number of access sites to the river does appear adequate in dispersing users onto the river corridor, if provisions for older users can be made.

Statement 6. The signs used to designate overnight camping areas are adequate in terms of orienting the users to these areas.

Although this statement response was favorable (2.86) many people continued to camp illegally, especially in the lower portion of the management area. The signing was adequate for those who read them, but often the signs were either ignored or torn down by those people wishing to camp at their favorite spot. A program to better inform the users of camping availabilities along the river should help solve this problem.

Statement 5. Law enforcement patrol in established campgrounds along the Blackfoot River is adequate. I suspect that some younger users interpreted this statement to mean no law enforcement patrol and they agreed. Older users, on the other hand, disagreed with this statement and interpreted it to mean that they did not encounter law officers often enough. The overall score (2.79) indicated agreement with this statement.

Statement 4. The number of presently designated camping areas are adequate for this stretch (Johnsrud Park upriver to the county line) of the Blackfoot River. The overall response score was only slightly favorable (2.52). Residents tended to disagree with this statement (2.49) and felt more camping areas are necessary. Non-residents agreed with the statement (2.69). Comparatively speaking, the number of available camping areas have been drastically reduced from past years and Montanans appear to be less satisfied with campground congestion than out of state visitors are.

Those statements receiving a "disagree" weighted response, in descending order, were as follows:

Statement 2. Overnight camping along the Blackfoot River should be restricted to established public campgrounds. Users slightly disagreed with this statement (2.45) despite the fact most all the land within the corridor is in private ownership.

Statement 13. A "fly fishing" only segment of the Blackfoot River would be desirable. At one time a proposal for a "fly fishing" only section was proposed. In general, users disagreed with this statement (2.29), with non-residents agreeing (2.70), but with resident users disagreeing (2.19). Fisheries biologists indicate that a regulation of this type might improve the angling. However, creel limits would have to be either substantially reduced or entirely abolished, and even then the results would be difficult to predict. While the "purist" fly fishermen favor this proposal, most other fishermen don't. A regulation of this type needs much study and does not appear desirable at this time. Women were largely unconcerned about this issue.

Statement 12. Some floaters interrupt fishermen when they float by. The response score indicates disagreement (2.28) with this statement. Concurrent floating and fishing use has not reached a level where conflicts have arisen between these groups. Neither user group perceives the problem much different than the overall score indicates. In drought years this problem may intensify.

Statement 11. The Sunset Hill road below the Clearwater River to the bottom of the Sunset Hill should be closed. Due to the specific nature of information requested with this statement, only 40 percent of the respondents had a definite opinion. The response to this statement was one of disagreement (1.87). Older users disagreed much

more strongly with the statement than younger users. Many more older visitors also expressed an opinion about this statement. The implementation of the road closure proposal was also once considered but if it were attempted at the present time, strong opposition would undoubtedly arise. The problems (unlimited parking, vehicles blocking gates, and continual widening of the road by the Missoula County grader) which prompted area landowners to make this proposal may now be lessening. Parking areas have been developed, regulations requiring people to park in them have been successful, the county grader operator has ceased to widen the road, and winter plowing has been discontinued.

Statement 1. Private landowners along the Blackfoot River should charge a fee directly to the public to use their lands for recreational purposes. This statement had the lowest weighted response (1.74) of all statements. Across the board, most users feel that minimum recreation opportunities should be provided as a governmental responsibility. Blackfoot River corridor landowners also do not feel that this is a viable solution to the recreationist-landowner conflict. Avoiding day to day recreation regulation activities on their land is a major incentive for landowners to enter recreation management leases with public agencies such as Missoula County.

Tables 29 through 31 refer to open-ended questions found on the survey instrument. The majority of opinions expressed concerning perceptions of recreation management aspects and recommendations for improvement were offered by resident users. Non-residents were generally reluctant to comment on a situation about which they had little knowledge.

Table 29. Aspects of the recreation management program felt to be particularly good by Blackfoot River users, 1976.

| Management Aspect | Frequency (N=142) |
|---|---|
| Clean, unlittered access areas and facilities. | 22 |
| Provision for an activity by providing access or facilities. | 18 |
| Allowing public access across private land to get to and use the river corridor. | 16 |
| Campgrounds and day use areas managed along the corridor. | 14 |
| The preservation of the Blackfoot River in a natural condition. | 14 |
| The formalized access agreement has resulted in less fear of landowner confrontation. | 12 |
| Fisheries management. | 6 |
| Closure of some areas to camping. | 5 |
| Providing facilities at developed areas. | 5 |
| Limiting the number of users in areas. | 5 |
| Attempting to manage recreation use on private land. | 5 |
| Montana Department of Fish and Game warden patrol. | 4 |
| Attempting to keep recreation management at the county level. | 2 |
| There is no charge to use the area. | 2 |
| The corridor is not commercialized. | 2 |
| The emphasis placed on education to get the public to cooperate with management efforts. | 1 |
| No target shooting is allowed in the river corridor. | 1 |
| Other recommendations. | 8 |
| Total | 142 |

Table 30. Aspects of the recreation management program felt not to be particularly good by Blackfoot River users, 1976.

| Management Aspect | Frequency (N=95) |
|---|---|
| Closure to random camping. | 13 |
| Not enough public campgrounds along the river. | 9 |
| Lack of maintenance on existing facilities (especially Johnsrud Park). | 6 |
| Lack of law enforcement patrol. | 6 |
| Not enough areas developed with facilities. | 6 |
| Lack of direct access to the river in some areas. | 5 |
| Too many roads have been developed. | 4 |
| Poor roads in access areas. | 4 |
| No regular litter or garbage pickup. | 4 |
| The river is over-fished and there are too many rough fish. | 4 |
| Not enough parking areas. | 3 |
| Parking is required in established areas only along the Sunset Hill Road. | 2 |
| Public land is not adequately marked. | 2 |
| The recreation management and conservation program is over-publicized. | 2 |
| Stocking of fish should be discontinued. | 2 |
| Facility development should be reduced. | 1 |
| No firewood is provided. | 1 |
| No warning of dangerous swimming areas | 1 |
| Vehicles are allowed in areas which are closed to motorized travel (Bear Creek and backcountry areas). | 1 |

Table 30. Continued - Aspects of the recreation management program felt not to be particularly good by Blackfoot River users, 1976.

| Management Aspect | Frequency (N=95) |
|---|---|
| No areas for floater camping. | 1 |
| Fire building at random along the river is prohibited. | 1 |
| Inadequate publicity about the implementation of the plan. | 1 |
| Other recommendations. | 17 |
| Total | 95 |

Table 31. Recommendations by Blackfoot River users concerning future recreation management programs, 1976.

| Recommendations | Frequency (N=221) |
|---|---|
| Preserve the river corridor in a natural condition. | 37 |
| Leave alone or do not manage. | 30 |
| Continue with the present access and recreation management program. | 14 |
| Provide more overnight camping areas. | 11 |
| Keep access across private land available. | 10 |
| Plant more fish. | 9 |
| Better maintenance of facilities and increased garbage service. | 8 |
| Establish a fly fishing only segment of the river. | 6 |
| Provide more direct access to the river. | 6 |
| Stricter enforcement of the litter law. | 5 |
| Increase local publicity about the project. | 5 |
| Provide garbage cans at access sites. | 4 |
| Provide more parking areas. | 4 |
| Restrict the number of users. | 4 |
| Leave all land open to camping. | 3 |
| Reduce the number of rules and regulations. | 3 |
| Provide drinking water at access sites. | 3 |
| Restrict areas to the use of motorized vehicles. | 3 |
| Provide toilet facilities. | 2 |

Table 31. Continued - Recommendations by Blackfoot River users concerning future recreation managment programs, 1976.

| Recommendations | Frequency (N=221) |
|---|---|
| Develop more access sites with facilities. | 2 |
| Provide raft launching improvements where access to the river is difficult. | 2 |
| Enforce no vehicle regulations in non-motorized travel areas. | 2 |
| Strict enforcement of all rules and regulations. | 2 |
| More public involvement in planning. | 2 |
| More Montana Department of Fish and Game law enforcement patrol. | 2 |
| No new camping areas be designated. | 2 |
| Restrict swimming to particular areas. | 2 |
| More Missoula County Sheriff patrol. | 2 |
| Purchase of private land along river by a public agency. | 2 |
| Do not build any more roads. | 2 |
| Issue overnight camping permits. | 2 |
| Continue monitoring use. | 2 |
| Discontinue fish planting. | 1 |
| Impose size limitation on fish kept. | 1 |
| Keep campgrounds off the riverbank. | 1 |
| Keep recreation managment and administration at the county level. | 1 |
| Develop a trail system. | 1 |
| Restrict scuba diving in the river. | 1 |

Table 31. Continued - Recommendations by Blackfoot River users concerning future recreation management programs, 1976.

| Recommendations | Frequency (N=221) |
|---|---|
| Do not close any existing roads. | 1 |
| Timber cutting should be restricted along the river. | 1 |
| Provide a map or brochure showing camping areas, public land, etc. | 1 |
| Repair existing access roads. | 1 |
| Other recommendations. | 18 |
| Total | 221 |

Blackfoot River users were especially pleased with the recreation management program as it related to the providing of facilities, the formalization of public access at selected access sites and along the river corridor, and the preservation of the river in a natural condition (Table 29). The major complaints made by Blackfoot users pertaining to the recreation management program were related to the closure of random camping along the river corridor, and the perceived lack of an adequate number of overnight campgrounds (Table 30). Table 31 reveals that the most frequent recommendation made by Blackfoot users was to preserve the natural character of the river corridor. The second most frequent recommendation made by users was to leave the river corridor alone and do not manage recreational use. The next most frequent recommendations were: continue with the present access and recreation management program, and provide more overnight campgrounds.

## Summary

Blackfoot River users encountered within the study area were primarily Missoula County residents (60 percent) on day use outings (60 percent). Almost 30 percent of the users had no previous experience on the Blackfoot River. Of those visitors from out of state, over 50 percent had no previous experience on the Blackfoot. Surprisingly, a greater proportion (21.1 percent) of out of state visitors had previous experience on the Blackfoot exceeding 15 years than did Montana residents (18.0 percent).

Fishing was the most popular activity on the Blackfoot River in terms of participation. Over 80 percent of all respondents

indicated that they fished the Blackfoot River. Other popular activities included relaxation (52.2 percent), camping (49.0 percent), picnicking (48.0 percent), swimming (36.6 percent), hiking (34.0 percent), sightseeing (30.4 percent) and rafting (25.4 percent). Statistically significant differences were found between the proportion of Montana residents participating in fishing, picnicking and rafting activities as compared to out of state visitors. A greater proportion of Montana residents were found to participate in these three activities.

Blackfoot users listed the Bitterroot River, the Clark Fork River and Rock Creek as the first, second, and third areas which they would use if the Blackfoot River were unavailable. Other areas named included rivers, lakes, national parks, forests and mountains. Montana residents felt more strongly (46.2 percent) that these other areas were not as suitable as the Blackfoot River for their recreational interests than did out of state visitors (30.6 percent). More Montana residents (27.6 percent) felt that areas were "too crowded" than did out of state visitors (12.9 percent). Only 2.7 percent of the residents thought that areas were not used enough, as compared to 5.4 percent of the non-residents who held this opinion. Residents also desired more facility development (13.5 percent) than did visitors from out of state (9.6 percent). Finally, the state of Montana was favored (63.9 percent) over Missoula County (41.5 percent) and the federal government (14.1 percent) by Blackfoot users to manage recreational use along the river.

Only about one third of the Blackfoot River users were aware of efforts to manage recreational use. The most effective methods through which these users were informed of management efforts were friends (44.4 percent), newspaper (32.4 percent) and official sources (16.9 percent). In light of the fact that 30 percent of the users had no previous experience on the Blackfoot, it is evident that information about the program must be provided more immediate to the visit on the river if management objectives are to be met. Only 7.7 percent of the users had actually reviewed a plan concerning recreation management efforts on the river.

Blackfoot River users agreed that people should be responsible for packing out their own garbage, that the natural character of the river corridor should be preserved, that areas should be set aside for non-motorized uses, and that campsites should be located off the riverbank. Users also agreed to a lesser extent that present access was adequate, directional signing to campgrounds was adequate, the number of campgrounds was sufficient and that law enforcement patrol in the campgrounds was sufficient. There were some meaningful differences between Montana residents and out of state residents, between younger users and older users, and between different periods of the summer concerning the opinions expressed by Blackfoot users. Blackfoot users disagreed that camping should be restricted to public overnight campgrounds, that a "fly fishing" only segment of the river be designated, that bank fishing and floating were conflicting uses, that the Sunset Hill Road be closed and that landowners charge the public directly for allowing use of their land. Users felt that the best

parts of the recreation management program were the provisions for access and facilities, and the preservation of the river corridor. Complaints centered mainly around various restrictions placed on public use of private land. Restricted camping on private land was most frequently mentioned.

# CHAPTER V

## USE ESTIMATION

An important informational requirement for many resource and people management problems concerns how much use currently exists. Surveys provide the basic data base dealing with existing populations. Inventories of this type form the first point in a time series for trend estimation. They may also assist recreation managers assess impacts of proposed management programs and techniques on the present user population.

In this chapter, use estimates are made for each section of the river corridor within the study area, identified earlier, for the 1976 summer use season. The season used here June 21 - September 22, only encompasses the summer use season when conflict potential is greatest. Additionally, this chapter will determine the amount of use which was devoted to the various activities which occurred on the Blackfoot River in the summer of 1976.

### Procedures

The estimates of river corridor use are based on the observed average weekend and weekday river section visitation rates multiplied by the appropriate number of days in each category between June 21 and September 22 (the summer use period). Although detailed use information was collected only during the latter half of the summer, the averages obtained from these observations are used as estimates for

the entire period. Differences in activity participation patterns not withstanding, site use patterns throughout the period were similar and I believe that this method of estimating use is justified. The use estimates are reported as recreational visits; one visitor observed engaging in a recreational activity (regardless of length of visit) within one of the river sections, constituted a visit.

Appendix A displays the dates, times and the weather conditions encountered when each river section was sampled. The time that each section was sampled daily varied between 8:00 a.m. and 8:00 p.m. Each section was sampled for eight hours. During the period that the section was sampled all observed users were counted and recorded on a data sheet (Appendix C). Information recorded on the data sheets was used to obtain the average weekend and weekday section visitation dates. The section and total corridor use estimates are found in Table 32. Appendix D describes each river section and the enclosed map shows the boundaries and location.

Table 32 displays the average weekday and weekend averages as computed from the dates the sites were observed. These daily averages are multiplied by the total number of weekdays (66) and weekend days (26) within the period (June 21 - September 22) and added together for the summer total for each river section. These 23 river section use estimates were then added together to arrive at the total study area use estimate.

Table 32. Site and total corridor use estimates for the Blackfoot River, summer, 1976.

| River Section | Weekday Average | Constant | Total Summer Weekday Use | Weekend Average | Constant | Total Summer Weekend Use | Total Summer Use[a] |
|---|---|---|---|---|---|---|---|
| 1 | 32.1 | x 66 | = 2,118.6 | 84.7 | x 26 | = 2,202.2 | 4,321 |
| 2 | 6.1 | x 66 | = 402.6 | 14.0 | x 26 | = 364.0 | 777 |
| 3 | 3.9 | x 66 | = 257.4 | 20.7 | x 26 | = 538.2 | 796 |
| 4 | 1.7 | x 66 | = 112.2 | 12.7 | x 26 | = 330.2 | 442 |
| 5 | 8.0 | x 66 | = 528.0 | 55.3 | x 26 | = 1,437.8 | 1,966 |
| 6 | 9.7 | x 66 | = 640.2 | 38.7 | x 26 | = 1,006.4 | 1,646 |
| 7 | 2.4 | x 66 | = 158.4 | 4.7 | x 26 | = 112.2 | 281 |
| 8 | 3.3 | x 66 | = 217.8 | 5.3 | x 26 | = 137.8 | 356 |
| 9 | 2.8 | x 66 | = 184.8 | 6.0 | x 26 | = 156.0 | 341 |
| 10 | 4.0 | x 66 | = 264.0 | 27.0 | x 26 | = 702.0 | 966 |
| 11 | 0.6 | x 66 | = 39.6 | 4.0 | x 26 | = 104.0 | 144 |
| 12 | 2.0 | x 66 | = 132.0 | 14.4 | x 26 | = 374.4 | 506 |
| 13 | 0.7 | x 66 | = 46.2 | 2.0 | x 26 | = 52.0 | 98 |
| 14 | 4.0 | x 66 | = 264.0 | 9.3 | x 26 | = 241.8 | 506 |
| 15 | 2.3 | x 66 | = 151.8 | 19.0 | x 26 | = 494.0 | 645 |

Table 32. Continued - Site and total corridor use estimates for the Blackfoot River, summer, 1976.

| River Section | Weekday Average | Constant | Total Summer Weekday Use | Weekend Average | Constant | Total Summer Weekend Use | Total Summer Use[a] |
|---|---|---|---|---|---|---|---|
| 16 | 0.4 | x 66 = | 26.4 | 3.0 | x 26 = | 78.0 | 104 |
| 17 | 2.2 | x 66 = | 145.2 | 9.8 | x 26 = | 254.8 | 400 |
| 18 | 5.2 | x 66 = | 343.2 | 11.0 | x 26 = | 286.0 | 629 |
| 21 | 1.3 | x 66 = | 85.8 | 8.2 | x 26 = | 213.2 | 299 |
| 22 | 0.0 | x 66 = | 0.0 | 9.5 | x 26 = | 247.0 | 247 |
| 23 | 2.1 | x 66 = | 138.6 | 9.0 | x 26 = | 234.0 | 373 |
| River Corridor | 94.8 | | 6,256.8 (40.0%) | 368.3 | | 9,576.0 (60.0%) | 15,844 |
| 19 | 9.2 | x 66 = | 607.2 | 18.2 | x 26 = | 473.2 | 1,080 |
| 20 | 33.6 | x 66 = | 2,217.6 | 63.0 | x 26 = | 1,638.0 | 3,856 |
| Harpers Lk. Clear. Cross. | 42.8 | | 2,824.8 (57.2%) | 81.2 | | 2,111.2 (42.8%) | 4,936 |
| Total Study Area | 137.6 | | 9,081.6 (43.7%) | 449.5 | | 11,687.2 (56.3%) | 20,780 |

[a]Rounded to nearest whole number

## Use Estimates

Examination of Table 32 reveals some interesting facts. The total 1976 summer use within the river corridor was estimated to be in excess of 15,000 recreational visits. With the addition of the use figures (4,936) for the two campgrounds on the lower Clearwater River (Harpers Lake and Clearwater Crossing) the total summer use for all the areas surveyed was in excess of 20,000 recreational visits.

Further examination of Table 32 reveals that summer use along the river corridor is the greatest in the lower river sections between Johnsrud Park and Whitaker Bridge. This area accounted for 62.8 percent of the total summer use along the river corridor. Other important summer use access sites along the river, listed in order of total recreational visits were River Bend campground, Roundup access, the confluence of the Blackfoot and Clearwater Rivers, Ninemile Prairie Fishing Access Site, and the Sunset Landing. Along the river corridor, fully 60 percent of the total summer use occurred on weekends, while only 42.8 percent of the use occurred on the weekends at the two Clearwater River campgrounds.

## Activity Participation Estimates

Activity participation information was recorded by the researchers for all groups observed within the river corridor during the sampling periods, regardless of whether or not they were a questionnaire respondent. By using the 20,780 total summer visits and applying this figure to the percentage each observed activity contributed to the total study area use during the summer, 1976, the estimated recreational visits

Table 33. Summer activity participation visits to the Blackfoot River, 1976.

| Activity | Percentage of Observed Groups Participating in Activity (N=960 groups) | Activity Use (Based on 20,780 total recreational visits) |
|---|---|---|
| Fishing | 55.3 | 11,491 |
| Camping | 23.8 | 4,946 |
| Relaxation | 9.2 | 1,912 |
| Picnicking | 9.1 | 1,891 |
| Rafting | 9.1 | 1,891 |
| Swimming | 7.3 | 1,517 |
| Sightseeing | 4.6 | 956 |
| Boating | 1.6 | 332 |
| Hiking | 1.5 | 311 |
| Outdoor games | 1.0 | 207 |
| Canoeing | .8 | 166 |
| Kayaking | .4 | 83 |
| Horseback riding | .4 | 83 |
| Motorbiking | .3 | 62 |
| Fauna collecting | .3 | 62 |
| Photography | .2 | 41 |
| Mushroom berry gathering | .2 | 41 |
| Bird, animal watching | .1 | 21 |
| Bicycling | .1 | 21 |

for each activity can be computed. Table 33 displays this data.

Table 33 reveals that over 11,400 summer recreational visits to the corridor were made for fishing in 1976. This figure is in line with estimates printed by the Montana Department of Fish and Game of angling pressure on the Blackfoot River. The Department estimates that 14,513 fishermen used the lower portion of the Blackfoot from Bonner to the confluence of the Blackfoot and Clearwater Rivers (Department of Fish and Game, 1977) during the summer of 1976.

Almost 5,000 visits were made for camping and nearly 2,000 visits were made respectively for relaxation, picnicking and rafting for the summer of 1976. The estimates for the remaining recreational activities observed on the river this past summer are displayed in Table 33.

Fall, 1976, hunting information from the Montana Department of Fish and Game Bonner check station shows the following for the two hunting districts (283 and 292) within and adjacent to the study area: a total of 3,597 hunting trips were checked at the Bonner station. Statewide hunter questionnaire survey information revealed that the check station figure was only about 15.6 percent of the total actual trips. So, in excess of 25,000 hunter trips were spent in the vicinity of the Blackfoot River corridor study area. However, probably only a small portion of the total hunters actually used the Blackfoot River directly.

## Summary

The data presented in this chapter was somewhat surprising. Total study area summer use in 1976 was in excess of 20,000 visits. This level of use pressure was fairly intense considering that the majority of land ownership within the study area is private. This data alone reveals that management of public use is not only necessary but critical if this private land is to remain available to the general public for access to and movement along the Blackfoot River.

The area of the river corridor which was most heavily used was that lying between Johnsrud Park and the Whitaker Bridge. Johnsrud Park was the single most intensely used park along the river corridor. This underscores the need for management of this popular recreation area by a public agency. The Harpers Lake Fishing Access Site was also very popular and heavily used. Weekend use accounted for over 60 percent of the total summer use in 1976.

Fishing participation accounted for over 11,400 visits to the Blackfoot River in the summer of 1976. Camping, relaxation, picnicking and rafting activities also accounted for a large number of visits to the Blackfoot during the summer. The most important fall activity in 1976 was hunting. This activity accounted for 25,000 hunter trips to the two hunting districts within and adjacent to the study area. Although the majority of these visits were not directly related to the river corridor some hunters camped and fished along the river during the course of their hunting trips.

# CHAPTER VI

## PROPOSED GUIDELINES

When a novel project with the scope of the Blackfoot River Conservation and Recreation Management Plan is implemented for the first time, problems are bound to arise. Projects of this nature take a certain amount of time, discussion, and public input to work out unforeseen problems. The strength of the concept, however, lies in the fact that it is flexible and changes can be made to arrive at solutions generally acceptable to all concerned. Based on the user study conducted during the summer, 1976, the public input provided by interested Blackfoot users, and ideas presented by Advisory Council members, this chapter will describe recommendations I feel are essential to the smooth operation of the project in the future.

### General Administration Recommendations

Despite some problems, the recreation management project implemented last summer was a success. By the summer of 1977 most of these problems should be reduced or eliminated. The corridor landowners overwhelmingly feel that their conflicts with recreationists were considerably reduced. Most river users are also satisfied that public access is assured despite private ownership of much of the river frontage, and that the river corridor is being preserved. Specific aspects of the project may not have complete public support but then again, most of the land is not public land.

The implementation of the recreation management program, as initiated last summer, should continue. The formal recreation lease agreement between the individual landowners and Missoula County should be signed prior to the summer use season. If a formal agreement was signed that designated the access sites as Missoula County property, then a county law enforcement officer could enforce the rules and regulations directly, without involving the individual landowner.

An individual should be hired each summer under the supervision of the Advisory Council to administer the program and patrol the river corridor daily. From past experience, the corridor landowners feel that daily patrol is necessary. It would be preferable if this individual could have law enforcement training, but the on-the-ground emphasis must continue to be one of public education and voluntary cooperation. If the individual has no law enforcement training, an official vehicle with two-way radio should be provided and cooperation by the Missoula County Sheriff must be assured. Arrest or citation of river users should be done only when all other available alternatives have been exhausted. All hiring and administrative work should be completed well in advance of the summer recreation season.

Questionnaire data revealed that the state of Montana was favored over either Missoula County or the federal government, by a majority of users, to provide management assistance to private landowners. Quite possibly, Missoula County was not favored because the county lacks a parks department. However, the corridor landowners generally feel that the project should be administered by the local level of government, if at all possible. The Department of Fish and

Game has taken a very active role in the project to date and I recommend that the project status remain as it is with county management of recreational use on private land. If, in the future, a county parks department is formed, the Missoula County Commissioners should place the management of the Blackfoot River corridor under the jurisdiction of this agency. If this option is not viable, perhaps Montana Department of Fish and Game, Recreation and Parks Division administration is desirable in the future. It is also possible that joint administration between the Department of Fish and Game and Missoula County might serve the interests of the project in the best manner. Other alternatives, as well, must be examined including administration by an incorporated user group.

This project has been based on the premise that the majority of recreational use within the Blackfoot River study area is by local area residents for primarily day use activities. The results of the use study validate this assumption and therefore the orientation of recreation management should continue in this direction. Provision for overnight camping use on public land is important in terms of public acceptance, but this activity should not become an overriding concern. The number of camping areas that were designated last summer did appear to be inadequate. Although the established overnight areas could legitimately serve all the campers, campground type group camping was not the experience that all users sought. During peak use periods, crowding was evident in the campgrounds and the potential for conflict (among and between overnight camper and day user groups) increased dramatically as did depreciative behavior. One more vehicle campground

below Whitaker Bridge is necessary. Implementation of some camping restrictions--possibly on the number of groups permitted--could allow this area to be used as a dispersed type of vehicle campground.

Floater related camping was also a problem in the upper river corridor. Provisions for this activity should be considered, possibly across the river from the Sperry Grade site (15). Floaters should be informed at float launching sites, that floater camping is available at Sperry Grade (if this area is decided to be the best site), on the Lubrecht Forest across from the River Bend Park, and in the backcountry area southeast of Whitaker Bridge.

Another problem which must be solved is the one of adequately informing users about the area, and its opportunities and restrictions. There is a fine line here between information and attraction. All those involved with the project, including the majority of the public, agree that the management program should not attract more use which will compound present recreational related problems and conflicts. However, the study revealed that very few users actually were aware of the program. Many of the public learned of the program through discussions with the recreation manager. In most cases, the recreationists were very satisfied with this personal information method, but because of the corridor length not all users could be personally contacted. Information appears to spread very quickly via word-of-mouth and by the end of the summer, some people were relating to the manager that information which he had told other users earlier in the summer. Although this response was gratifying, over 30 percent of the people who used the Blackfoot during the summer of 1976 were there for the

first time. It must be assumed that this situation will occur in future summers. Somehow these newcomers must be informed more adequately.

Perhaps the most efficient and effective way to inform users of the project objectives and restrictions is by interpretive signing at either end of the lower river corridor. This approach was tried last summer on the Sunset Hill Road in regards to parking in the established areas. The signing worked very well and the public cooperated. This same approach should be tried in the lower corridor where illegal camping and firebuilding were re-occurring problems. Large (4 feet by 8 feet) map signs, with camping and day use areas marked, restrictions listed, available opportunities shown, and objectives ennumerated, should be erected. These signs should be located off the main highway so as not to unduly attract the casual highway traveller to the area. One such sign should be placed near Johnsrud Park, another on the Twin Creeks Road near the mouth of Gold Creek, and the third on the Ninemile Prairie Road, past the Roundup access site. A handout pamphlet containing information similar to that on the large signs should also be printed so that the manager can provide this information to users. Publicity about the project should also continue in the local media (newspapers and radio) when warranted. In this manner, residents and out of state visitors, first year users and 50 year users should be able to receive adequate information about the area and thereby reduce the number of potential confrontations with the recreation manager. In addition, permanent routed wood site identification signs were prepared by the Department of Fish and Game last summer and these signs should be erected before the next summer

use season (1977). Day use signing of a more permanent nature, rather than the present cardboard signs, would also be desirable. Last summer some campers tore down the cardboard signs, set up camp and then told the manager that there were no signs prohibiting the activity. Day use signing of a more permanent nature and interpretive signing on all major roads in the lower corridor should help reduce this problem.

The remaining recommendations concern implemented and proposed management programs for which user opinion data were collected. These recommendations are based both on the results of the data and on the observed effectiveness of present programs.

The pack-in, pack-out policy for trash should be continued at all areas (except possibly Johnsrud Park, Clearwater Crossing, and Harpers Lake) as it was overwhelmingly favored by the public and seemed to work very well in most areas last summer.

The Conservation Easement program to protect the land along the river from incompatible development should continue with all possible speed as river users overwhelmingly favor protection and preservation of the Blackfoot River.

The areas of the Blackfoot River presently closed to motorized vehicular use should remain closed, particularly the Conservation Reserve and the backcountry area near Whitaker Bridge. Despite early vandalism problems at the gate near Whitaker Bridge (Appendix D) it appears as if the closure has been accepted by even those people who strongly protested the action. The gate is presently in place and if the road closure remains in effect another year, resistance will continue to diminish.

The campsites at existing overnight camping areas should be moved at least 100 feet away from the riverbank. The riverbank and the beach area adjacent to the river should be protected. Users collectively feel that everyone should be allowed to use the beach rather than just a few selfish campers who set up camp right on the water's edge.

The number of existing river access sites should remain at the present level. Two informally used areas (Thibodeau Rapids and Sunset Landing) should be formally declared as day use sites. Provisions may have to be developed so that senior citizens can drive near the water in selected places.

The effectiveness of the signing program to direct users to the campgrounds should be increased by publicity, interpretive corridor signing and the development of a handout brochure. Although the opinion data showed that users felt that the present signing was adequate for informational purposes, too often the signs were torn down or ignored. Signing of a more permanent and informative nature is needed.

Although law enforcement patrol was rated adequate by users, I believe more is needed, especially on the weekends. It is during this period of the week that illegal camping, trespass, vandalism, and potential conflicts are likely to occur. The Fish and Game law enforcement officers were regularly seen in the lower Blackfoot River corridor (below Belmont Creek), but sheriff patrol should be increased in this area and elsewhere along the river corridor.

The proposal to create a "fly fishing" only segment of the river and the proposal to close the Sunset Hill Road should not be

acted upon at this time because of widespread public disapproval. Although strong public opposition to these proposals is likely to continue, further study of these alternatives may be desirable in reaching some compromise positions.

Finally, it is recommended that no fees be charged by landowners to the public for use of their lands for recreational purposes. Campground fees may be desirable in the future to offset development or maintenance costs, but at the present, use levels do not warrant it. Administration costs for a campground fee charge would surely exceed the money collected.

## Specific Recommendations For Recreation Access Areas

The specific recommendations made in this part of the report concern problems that are discussed in Appendix D. Each of the 23 river sections is assigned a number corresponding to that of the area description in Appendix D, and to the enclosed map.

1. Johnsrud Park. The high level of public use at this popular recreation area warrants the expenditure of public funds to manage the area. The Department of Fish and Game seems to be in the best position to assume management of this park. The expressed position of the Department is to provide these types of facilities for public outdoor recreation use. Negotiations between Champion Timberlands and the Montana Department of Fish and Game should continue to assure that this valuable area remains in the public domain. In the immediate future, new restrooms are badly needed if overnight camping is to be encouraged at this site.

A specific site plan should be formulated for this area. Quite possibly, the University of Montana with the assistance of the Advisory Council could undertake this effort. Specifically, the site plan should not only accommodate the present uses but also attempt to reduce conflicts between different user groups. The site plan should also recommend which facilities should be removed, renovated, or replaced. The costs of the proposals and a schedule of implementation should also accompany the site plan as well.

2. Champion Land. River users must be encouraged to park vehicles in the provided turnouts rather than on the traffic lanes. The access road to the Gold Creek area should be signed as a day use area and more frequent patrol instituted.

3. Daigles Eddy. One access road to the river in the northern end of this section should possibly be closed. The remaining access roads should be signed as day use areas and the present restrictions on camping and firebuilding should remain in effect.

4. Sheep Flats. The terrace east of the river on which sites 2 and 3 are located should be an area considered as a potential overnight camping area, possibly with necessary restrictions to insure a dispersed type of vehicle camping experience. This terrace is ideally suited for this activity because access is easy, there are many trees for screening and the road and the river constitute natural firebreaks. Although the steep incline to the river in this area makes float launching difficult, the steepness of the bank would naturally restrict vehicles from the river's edge. If this area were to be used for camping, restroom facilities must be provided.

Two access roads to the river in this area should be closed to vehicle traffic. The first road is the one which leads to the terrace where sites 2 and 3 are located. The steep switch-back on this road is terribly eroded and continued traffic will only intensify the problem. The second closure should occur on a seldom used road located 2,000 yards to the south. Parking in this area should be provided.

Camping and firebuilding on the west side of the river (Sheep Flats) should continue to be restricted with increased patrol to assure compliance.

5. Thibodeau Rapids. The State land on the south side of the river within this section (site 4) should also be considered as a future overnight camping area. This site is desirable because presently no camping opportunity is provided along this part of the river. Many factors such as public ownership, the existence of natural firebreaks (road and river), the large size, easy access, and the steep riverbank would make this a good potential campground. Appropriate signing and toilet facilities would have to be installed. The steepness and fragility of the riverbank may necessitate the construction of steps to the river, as use will inevitably increase. The State land north of the river should remain closed to camping and firebuilding. Any logging in this area should be compatible with the recreation management plan.

The access site located at the rapids itself should remain a day use site and parking should be restricted to the well worn upper bench. This site is a very popular picnic area and because of the natural firebreaks, picnic fires may be allowed at this location.

The major recommendation in the Whitaker Bridge vicinity would be to keep parking from in front of the gate leading into the back-country area. It also may be desirable in the future to close the road leading from Whitaker Bridge to Twin Creeks.

6. Red Rock Beach - Whitaker Bridge. A steep roadcut to the river in the northeast quadrant at the bridge is the best location for float launching. Vehicles should be encouraged to park elsewhere however, because the available parking is limited and congestion does occur on weekends. Vehicles should not be allowed to park near the railroad tracks. The day use site at the southeast quadrant should remain as is and vehicle entry should be limited to that area near the main road. McGahan warns of riverbank erosion at this site and some measures may have to be instituted to prevent further destruction.

Vehicles should be restricted from the beach area upstream from the bridge. A large parking area should be located on the upper most terrace on the east side of the river to reduce parking and congestion along the road. This area can also serve floaters putting in near the bridge. The parking area should be fenced to keep vehicles in it and walk-in access provided to the beach. Camping and fire-building should continue to be prohibited at all access sites in this area. Large keggers or outdoor concerts should be discouraged in this area as well.

7. Belmont Creek. As a parking area is provided at this site, vehicles should be prohibited from parking along the main road to minimize hazards with logging traffic. The fencing project began at this site last summer should be completed and if possible extended to keep livestock from the day use site. Vehicles (especially motorcycles),

camping, and firebuilding should continue to be restricted in this area. Scrap metal and litter should be removed from along Belmont Creek within the site. Erosion control work along the old road is desirable to prevent further damage.

8. Backcountry Area. This area should remain closed to all motorized vehicles except when circumstances absolutely require administrative ingress. Adequate parking is provided near Whitaker Bridge. Site 7 in the vicinity of the eagle's nest should be abandoned and backcountry camping use shifted to site 8. Logging in the area of the eagle's nest should also be discontinued. Floaters and hikers should be better informed that camping and firebuilding are allowed within this area at site 8, and this site should be signed to indicate these uses. Patrol activities (on foot) should be increased in this area as well.

9. West Ninemile Prairie Flat. The access road that leads into the area from near the River Bend campground should remain open to vehicles. Signing at this location should indicate that the area is for day use only. Shooting within this area must be stopped. Litter removal from many locations on this flat would also be desirable.

10. River Bend Campground. The popularity of this campground was evident last summer, and a need has developed for toilet facilities, which should be constructed before the 1977 season. The beach area and the northern terrace have both been damaged by indiscriminate vehicle use. Through signing and necessary barrier construction both areas should be restricted to vehicle traffic. Camping should not be allowed within 100 feet of the water. Cutting live trees for firewood has also

become a problem and will best be solved if campground users will comment directly to the party responsible or report it to the proper authorities. The same solution to vandalism will best prevent this activity.

The park should also be fenced to keep livestock out of the area. Natural barriers on three sides would necessitate fencing only along the Ninemile Prairie Road, however, a cattle guard would have to be installed on the access road.

A specific site plan should also be developed for this area in a manner similar to that suggested for Johnsrud Park. This plan should provide for restroom location, the protection of fragile areas, and the separation of conflicting uses (overnight camping and day use).

11. Sullivan Homestead. Parking should be provided off the Ninemile Prairie Road and vehicles restricted from driving to the river. This would necessitate the closing of two roads. Overnight camping should also continue to be restricted.

Purchase or lease of the small Champion owned tract near the Ninemile Prairie Fishing Access Site by the Department of Fish and Game would provide good floater access in this area.

The cabin site on the Lubrecht Forest should be phased out in the future, if possible, so an uninterrupted trail could be developed along this School of Forestry ownership.

12. Ninemile Prairie Fishing Access Site. As mentioned above, the purchase or lease of a small parcel of land west of the park for floating access would greatly enhance the utility of this site. Development of a trail to the river in the vicinity of the present

campground would halt the widespread erosion created by users sliding down the hillside. Parking should be restricted around the large pine tree.

13. Collins-Vannoy Land. Trespass across this section should be prevented. Purchase of the eastern most tract of the Collin's property by a public agency would be desirable.

14. Sunset Landing. This area should be an established day use site. Unlimited vehicle access upstream in this area should be restricted and a parking area developed on the entrance road near the old bridge pilings. Disassembly of old fire pits and trash removal should also be completed.

15. Roundup Access. The two quadrants south of the bridge should be permanently closed to parking. This will require State Highway Department approval because the areas are within the highway right-of-way. Ditching along the highway or the erection of permanent barriers would accomplish this objective.

The Advisory Council should work closely with concerned recreationists at this location to assure the best possible river access. This may require some adjustment in the present fence locations. However, under no circumstances should vehicles be allowed to enter the old access site at the northeast quadrant of the bridge. This area appears to be recovering from extensive resource damage caused by past vehicular use. New routed wood signs were constructed by the State Forester last summer which directed vehicles to the new site. These signs should be installed this year (1977).

Within the present access site, day uses only should continue.

16. Hunter Point. Firebuilding, shooting and camping should continue to be prohibited. Fence adjustment should be made when possible to allow users to hike along the river unhindered. Foot patrol of the area should also be increased.

17. Sunset Hill. The access site (13a) and the area along the road should remain as day use areas. Old "no trespassing" signs along the river should be removed to reduce confusion in the minds of the users. The development of another small parking area in the middle of this corridor, primarily for senior citizens, may be desirable in the future.

18. Clearwater Confluence. A restriction on the length of time vehicles can park at this site (13b) and at Sunset Hill (13a) may have to be implemented to prevent river floaters from monopolizing existing parking slots. The time restriction may be necessary only on weekends. Vehicle access elsewhere in this area should continue to be restricted as should camping and firebuilding. Use of the road leading to the Lindbergh homesite should also be restricted to all but area landowners. Some litter should also be removed near site 13b.

Parking problems may develop in the future along the Clearwater River in the vicinity of Highway 200. A small parking area may be necessary for anglers fishing in this location.

19. Clearwater Crossing Fishing Access Site. Vehicles should be restricted to established roads only in this area. Other state park regulations should be enforced, particularly those pertaining to leashed pets and the 14-day camping limit. The road which extends upstream from the campground to Blanchard Lake should be closed to vehicles.

Rutting and other resource damage is extensive along this road.

20. Harpers Lake Fishing Access Site. Off-road vehicle use has been fairly effectively controlled in most areas of the park. However, this activity should be further restricted along the Clearwater River in the campground, and in the vicinity of Harpers Lake. Road repair work is also desperately needed in this area as is some facility repair work (mostly fireplaces) in the campground. Hiking along the Clearwater River upstream from the campground should be restricted in the spring and early summer when eagles and ospreys are nesting in that vicinity. All other state park regulations should be enforced. This area and Clearwater Crossing should continue to provide camping opportunities for those people using the upper end of the river corridor.

21. Conservation Reserve. This area should remain in a natural condition with access limited to non-motorized means and only day use activities should be permitted. Vehicle travel on the Lindbergh road and the old Bear Creek Road should be restricted to all but the area landowners. Overnight camping by floaters within this area points to the need for an area of this sort on the river in the upper corridor, preferably on public land. Within the conservation reserve, wildfires are a problem because of the lack of access, so a floater campsite should be designated outside of this area. Increased foot, horseback or float patrol is absolutely necessary to adequately manage this area.

22. Sperry Grade. Establishment of a floater camping site, on State land across the river from the Clearwater Forest Unit Headquarters

is recommended. This is an ideal site because of the close proximity of the State fire station. Floaters entering the river above this area should be informed of the camping opportunity. The eventual termination of the cabin leases would be desirable from an aesthetic and recreational access viewpoint. If this is not possible, provisions should be considered to provide long term protection of the immediate river corridor. Public access along the river should also be unrestricted.

23. County Line Park. Resource damage caused by unrestricted vehicular traffic is quite evident at this site (16) and on an adjacent site in Powell County. All vehicle use should be restricted in these areas. Parking should be provided near the highway and walk-in access encouraged. Day use type activities should continue at this site. The natural features of the area should be preserved, including the protection of nearby raptor nests. Litter and old firepits should be cleaned up. Access for floaters should be provided as well as signs which indicate the available floater camping sites. Camping across Highway 200 near the gravel pit should also be restricted.

## Conclusion

The recommendations reported in this final chapter should, if implemented, assure the most efficient management of the river corridor in future years. The management of recreational use will prove beneficial to the public, who will be assured access to the Blackfoot River, and to the landowner, who will be assured assistance in managing public use on private land.

This report constitutes only a description of the existing situation on the Blackfoot River during the 1976 summer use season. The opportunities for continuing research are many. Specifically, use information should be collected for the other seasons of the year. Another important area of potential research deals with determining why Blackfoot River visitors behave in the manner they do. Behavioral information about Blackfoot users could assist the recreation manager in determining the possible social outcome of management decisions implemented in the future as well as assist in keeping public interest and cooperation in the project at a high level. Further research along these lines should be encouraged.

In retrospect, the problems that were encountered during the first summer of the implementation of recreation management proposals on the river were far outweighed by the benefits. I believe that the data presented in this report make it clear that the general public supports the objectives and implemented proposals of the Blackfoot River Conservation and Recreation Management Plan. Certainly, all the members of the Advisory Council feel that the continuation of the project is a must. After necessary adjustments are made and the project stands the test of time for a few more years, hopefully the plan can be extended to the remainder of the Blackfoot River and elsewhere on other scenic river resources.

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# APPENDIX A

## Sampling Schedule

# APPENDIX A

## Sampling Schedule

| Date (1976) | River Sections | Starting Time | Maximum Temperature[a] | Precipitation[a] |
|---|---|---|---|---|
| Wed. 7-28 | 1-4<br>19-20 | 10:00 AM<br>10:00 AM | 90°F. | --- |
| Thurs. 7-29 | 5-8<br>21-23 | 10:00 AM<br>9:00 AM | 94 | trace |
| Wed. 8-4 | 9-12<br>16-18 | 10:00 AM<br>10:00 AM | 78 | --- |
| Thurs. 8-5 | 1-4<br>13-15 | 10:00 AM<br>10:00 AM | 86 | trace |
| Fri. 8-6 | 5-8<br>21-23 | 10:00 AM<br>11:00 AM | 94 | trace |
| Sat. 8-7 | 9-12<br>19-20 | 10:00 AM<br>10:00 AM | 87 | trace |
| Sun. 8-8 | 13-18 | 10:00 AM | 81 | --- |
| Wed. 8-11 | 22-23 | 11:00 AM | 92 | .20 inches |
| Thurs. 8-12 | 1-4 | 10:00 AM | 68 | .25 inches |
| Fri. 8-13 | 5-8<br>19-20 | 11:00 AM<br>10:00 AM | 75 | --- |
| Sat. 8-14 | 1-4<br>17-18,<br>21-23 | 11:00 AM<br>11:00 AM | 77 | trace |
| Sun. 8-15 | 9-12<br>13-16 | 11:00 AM<br>9:00 AM | 84 | trace |
| Mon. 8-16 | 5-8 | 8:00 AM | 92 | trace |
| Tues. 8-17 | 19-20 | 8:00 AM | 75 | |
| Wed. 8-18 | 17-18,<br>21-23 | 12:00 Noon | 72 | 1.00 inches |

Sampling Schedule (Continued)

| Date (1976) | River Sections | Starting Time | Maximum Temperature[a] | Precipitation[a] |
|---|---|---|---|---|
| Thurs. 8-19 | 13-16 | 12:00 Noon | 78°F | |
| Fri. 8-20 | 1-4<br>9-12 | 8:00 AM<br>9:00 AM | 77 | .085 inches |
| Sat. 8-21 | 5-8<br>19-20 | 9:00 AM<br>9:00 AM | 75 | --- |
| Sun. 8-22 | 1-4<br>17-18,<br>21-23 | 9:00 AM<br>9:00 AM | 82 | --- |
| Mon. 8-23 | 13-16 | 8:00 AM | 92 | --- |
| Tues. 8-24 | 9-12 | 8:00 AM | 74 | .03 inches |
| Wed. 8-25 | 5-8 | 12:00 Noon | 82 | --- |
| Thurs. 8-26 | 19-20 | 12:00 Noon | 88 | --- |
| Fri. 8-27 | 1-4<br>17-18,<br>21-23 | 12:00 Noon<br>8:00 AM | 78 | --- |
| Sat. 8-28 | 5-8<br>13-16 | 9:00 AM<br>11:00 AM | 82 | --- |
| Sun. 8-29 | 9-12<br>19-20 | 12:00 Noon<br>11:00 AM | 86 | --- |
| Mon. 8-30 | 9-12 | 9:00 AM | 84 | --- |
| Tues. 8-31 | 13-16 | 9:00 AM | 87 | --- |
| Fri. 9-3 | 13-16 | 10:00 AM | 82 | --- |
| Sat. 9-4 | 9-12<br>17-18 | 10:00 AM<br>10:00 AM | 74 | --- |
| Sun. 9-5 | 1-8 | 10:00 AM | 75 | --- |
| Mon. 9-6 | 17-23 | 9:00 AM | 84 | .08 inches |
| Tues. 9-7 | 1-8 | 10:00 AM | 67 | .25 inches |

Sampling Schedule (Continued)

| Date (1976) | River Sections | Starting Time | Maximum Temperature[a] | Precipitation[a] |
|---|---|---|---|---|
| Thurs. 9-9 | 9-16 | 10:00 AM | 66°F | --- |
| Fri. 9-10 | 19-20 | 8:00 AM | 71 | --- |
| Mon. 9-13 | 1-4 | 11:00 AM | 81 | .01 inches |
| Tues. 9-14 | 17-18, 21-23 | 8:00 AM | 77 | trace |
| Thurs. 9-16 | 17-18, 21-23 | 11:00 AM | 66 | .33 inches |
| Fri. 9-17 | 5-8 | 9:00 AM | 72 | --- |
| Sat. 9-18 | 9-12 | 9:00 AM | 66 | trace |
| Sun. 9-19 | 19-20 | 10:00 AM | 72 | .09 inches |
| Mon. 9-20 | 13-16 | 9:00 AM | 62 | .05 inches |
| Wed. 10-13 | 1-23 | 10:00 AM | no data | no data |
| Wed. 11-10 | 1-23 | 10:00 AM | no data | no data |

44 Total sampling days.

[a]Maximum temperature and precipitation data from the Lubrecht Forest weather station located at the Greenough Post Office (elevation 4,100 feet).

# APPENDIX B

## The Questionnaire

# APPENDIX B

Code number _____

The following questionnaire has been developed to evaluate the present recreational use of the Blackfoot and the lower Clearwater Rivers. The Missoula County Commissioners and the Montana Fish and Game Commission are funding a study concerning an approach to managing public use and preserving the scenic character of the Blackfoot River corridor between Johnsrud Park east to the Missoula-Powell County line.

An accurate reply to the following questions will provide needed information on present recreational use patterns and will aid in fulfilling your future recreational needs. Your responses to questions will be treated anonymously and will be used for no other reason than that stated above. You may obtain the results of this survey by writing the Missoula County Commissioners, Missoula, Montana, 59801, as early as December, 1976.

Thank you very much for your time. Sincerely, Jerry Walker, Research Assistant, U. of M.

1. What is the length of your visit in the Blackfoot River corridor?
_____longer than 7 days
_____4-7 days
_____2-3 days
_____on a one-day outing

2. Do you presently reside in Montana?
_____yes
If yes, in what county do you live?
_____(Montana county)
_____no
If no, in what state do you reside?
_____(state)

3. Indicate the approximate size of the community in which you live.
_____rural
_____small town (under 2,500)
_____large town (2,500-9,999)
_____small city (10,000-99,999)
_____large city (100,000 or over)

4. Please indicate your age.
_____14 and younger
_____15-25
_____26-39
_____over 40

5. Please indicate your sex.
_____male
_____female

6. How many other people arrived in the same vehicle you did (please do not count yourself)?
_____number in group
Please indicate the number of people in each age group and of each sex.

| Male | Female | |
|---|---|---|
| _____ | _____ | 14 and younger |
| _____ | _____ | 15-25 |
| _____ | _____ | 26-39 |
| _____ | _____ | over 40 |

7. In what type of vehicle did you arrive?
_____passenger car
_____pickup truck
_____recreational vehicle
_____motorcycle
_____other, specify:_____

8. If you are camping, what type of shelter(s) are you using? Please check all that apply.
_____none
_____tent or tent trailer
_____trailer
_____camper
_____camper shell
_____other, specify:_____

9. Please indicate your occupation and your spouse's, if married.

| You | Spouse | |
|---|---|---|
| _____ | _____ | agriculture |
| _____ | _____ | clerical &/or sales |
| _____ | _____ | housewife |
| _____ | _____ | professional, semi-professional or managerial |
| _____ | _____ | semiskilled or unskilled worker |
| _____ | _____ | service worker |
| _____ | _____ | skilled worker |
| _____ | _____ | other, specify:_____ |

10. Check the highest education held by you and your spouse, if married.

| You | Spouse | |
|---|---|---|
| _____ | _____ | less than 8th grade |
| _____ | _____ | eighth grade graduate |
| _____ | _____ | high school, unfinished |
| _____ | _____ | high school, graduate |
| _____ | _____ | two years of college or less |
| _____ | _____ | more than two years, no degree |
| _____ | _____ | Bachelor's degree |
| _____ | _____ | Master's degree |
| _____ | _____ | other, specify: _____ |

11. Check the broad income level category for your combined household.
_____under $5,000
_____$5,000-7,999
_____$8,000-11,999
_____$12,000-14,999
_____$15,000-19,999
_____$20,000 and above

12. Please check the activity or activities that you engage in along the river. Place a double check next to the one activity you engage in the most.

| | |
|---|---|
| _____picnicking | _____camping |
| _____swimming | _____rafting |
| _____rest, relaxation | _____hunting |
| _____bird-animal watching | _____motor biking |
| _____fishing | _____walking, hiking |
| _____photography | _____pleasure driving |
| _____canoeing | _____playing games |
| _____horseback riding | _____mushroom or berry gathering |
| _____sightseeing | _____kayaking |
| _____rock hunting | _____snowmobiling |
| _____bicycling | _____ski touring |
| _____snowshoeing | _____other, specify: _____ |

13. Where would you go for the same activities if the Blackfoot River was not available?
_____
Does that area suit your recreational interests as well as the Blackfoot River?
_____yes
_____no

14. How many years have you been using the Blackfoot River for recreational purposes?
_____.

(over, please)

15. In an average year, approximately how many days do you visit this particular site during the following seasons?

_____days Spring (Mar 20-June 20)
_____days Summer (June 21-Sept 22)
_____days Fall (Sept 23-Dec 20)
_____days Winter (Dec 21-Mar 19)

16. Do you think this site is presently
_____too crowded
_____just right
_____not used ennugh

17. Do you feel this site should be
_____developed with more facilities
_____left as it is

18. List the one aspect about this site (if any) that you particularly like.

_____

19. List the one aspect about this site (if any) that you particularly dislike.

_____

How do you feel this could be improved?

_____

20. Do you visit other sites along the Blackfoot River?
_____yes
_____no

What other three sites along the Blackfoot River do you most often visit? How many days do you visit them in the summer?

_____site_____days
_____site_____days
_____site_____days

21. If you use more than one site, what is your favorite site along the Blackfoot River?

_____

22. Are you aware of efforts to manage recreation use through the "Blackfoot River Conservation & Recreation Management Plan"?
_____no
_____yes

If yes, did you hear about it from
_____friends
_____radio
_____television
_____newspaper
_____other, specify:_____

23. Have you had an opportunity to read the plan?
_____yes
_____no

24. Please indicate what level of government you feel should provide recreation management assistance, for such things as site development and administration, to private landowners along the Blackfoot River for allowing the public to use their lands for recreational purposes.
_____Missoula County
_____State of Montana
_____Federal Government

25. Which one aspect of recreation management on the Blackfoot River do you feel is particularly good?

_____

26. Which one aspect of recreation management on the Blackfoot River do you feel is not particularly good?

_____

The following statements describe certain opinions which many Blackfoot River users may or may not hold in connection with recreation management and preservation of the river corridor from Johnsrud Park east to the Missoula-Powell County line. Please indicate the extent to which you agree with each statement by writing the letters that best represent your opinion in the provided blank.

| SCALE |
|---|
| SA. STRONGLY AGREE. This represents my opinion. |
| A. AGREE. I agree more than I disagree. |
| N. NO OPINION. I have no basis for judgement or I don't know of the situation. |
| D. DISAGREE. I disagree more than I agree. |
| SD. STRONGLY DISAGREE. This does not represent my opinion. |

27. Private landowners along the Blackfoot River should charge a fee directly to the public to use their lands for recreational purposes. ___

28. Overnight camping along the Blackfoot River should be restricted to established public campgrounds. ___

29. In campgrounds, camping units should park at least 100 feet away from the river so as to allow everyone to use the beach area. ___

30. The number of presently designated overnight camping areas are adequate for this stretch (Johnsrud Park up river to county line) of the Blackfoot River. ___

31. Law enforcement patrol in established campgrounds along the Blackfoot River is adequate. ___

32. The signs used to designate overnight camping areas are adequate in terms of orienting the users to these areas. ___

33. The river corridor users should be responsible for packing out their own garbage. ___

34. Access to the Blackfoot River, above Johnsrud Park to the Missoula-Powell County line, is adequate. ___

35. The Blackfoot River, above Johnsrud Park and the Missoula-Powell County line, should be preserved in its present condition. ___

36. Parts of the Blackfoot River corridor should be accessible only by non-motorized means (i.e., horseback, foot travel, skis, etc.) ___

37. The Sunset Hill road below the Clearwater River to the bottom of the Sunset Hill should be closed. ___

38. Some floaters interrupt fishermen when they float by. ___

39. A "fly fishing" only segment of the Blackfoot River would be desirable. ___

40. What one recommendation would you make about the management of this river corridor?

_____

_____

THANK YOU FOR YOUR COOPERATION AND INTEREST IN THIS STUDY.

# APPENDIX C

## The Observation Data Sheet

# APPENDIX C

Vehicle key
Car - 1
Truck - 2
Truck w/camper - 3
Truck w/camper shell - 4
Motorcycle - 5
Rec. vehicle - 6
Vans & buses - 7
Other - 8

Grid_____
Date_____
Researcher_____

Weather_____

| Vehicle code | State & County if Montana | Estimated visitors/ vehicle | Activity participation | Time Periods | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

## APPENDIX D

### Blackfoot Recreation Management Area -

### A Description of Use Along Each Section of the River

1. Johnsrud Park
2. Champion Land
3. Daigles Eddy
4. Sheep Flats
5. Thibodeau Rapids
6. Red Rock Beach - Whitaker Bridge
7. Belmont Creek
8. Backcountry Area
9. West Ninemile Prairie Flat
10. River Bend Campground
11. Sullivan Homestead
12. Ninemile Prairie Fishing Access Site
13. Collins-Vannoy Land
14. Sunset Landing
15. Roundup Access
16. Hunter Point
17. Sunset Hill
18. Clearwater Confluence
19. Cearwater Crossing Fishing Access Site
20. Harpers Lake Fishing Access Site
21. Conservation Reserve
22. Sperry Grade
23. County Line Park

# APPENDIX D

## Blackfoot Recreation Management Area - A Description of Use Along Each Section of the River

The existing resources and recreational uses along each section of the river is examined in this appendix. Special attention is paid to the established access sites. Each river section is designated with a number and legal description of its location. These tracts are marked on the map with identifying numbers. Individual recreation areas are also noted on the map.

Following the area descriptions are Tables 34 through 39, which display questionnaire data related to a particular river section. Table 34 displays the number of questionnaires collected at each of the 23 river sections. Information was collected on the average number of days the respondent spends at the site during each of the four seasons (Table 35), perceptions of site use levels (Table 36) and preference for facility development (Table 37). Tables 38 and 39 reveal what aspects of the particular river section were liked and disliked by Blackfoot users respectively.

1. Johnsrud Park (Section 28, T14N, R16W).

This area has been managed by the Potomac Valley Garden Club on a voluntary basis for the past 15 years through a lease agreement with the Champion International Corporation, owner of the property. Unruly crowds, destruction of facilities, and maintenance costs now

necessitate either management by a public body or public assistance to the club in dealing with these problems.

The site, located 1,000 yards off Highway 200, is situated between the river and the main logging road. The land south of the park has been developed into homesites, which now block the original access road. Across the river from the park is the Milwaukee Railroad. Fishermen and hikers often park at McNamara's Landing and walk along the right-of-way to their desired site. Steep, scenic cliffs backdrop the railroad tracks.

The park itself is in an advanced state of disrepair. Litter is present, facilities are falling apart, and resource damage is extensive. At present, the following facilities are located on the site: six single latrines, picnic tables, garbage can racks, signing, a children's play area, a group picnic site, fireplaces, a ball field and a road system. Repair or replacement of all these facilities is necessary. Other improvements to satisfy and segregate conflicting uses are also necessary.

Johnsrud Park was the heaviest used site along the recreation management corridor in 1976, and is very popular with Missoula residents. Because the well known park is close to Missoula and located near a major highway, its importance to the overall recreation resource of the Blackfoot River cannot be over emphasized.

Although the park has been designated as an overnight camping area, day use activities accounted for a greater percentage of use (75 percent to 25 percent). The park is popular with out of state visitors because it is close to the highway and contains some basic

facilities. Although the road system is rough and narrow, the park is popular with people using large trailers, recreational vehicles and camper units. Approximately one half the campers observed used tents, and the remainder used trailers, campers or recreational vehicles. Some float related camping also occurred on the site. Camping use occurred throughout the park as a designated camping area does not exist. Conflicts between campers and day users was a problem.

The most popular day use activity was fishing. A deep hole with slow water at the base of the cliffs at the north end of the park is a particularly popular place. Problems between fishermen and swimmers at this locale may occur because of a desirable sandy beach. Swimmers did complain of litter and fish entrails.

Johnsrud Park was also a major floater access point. From the park to the Bonner weigh station is an average all day float (4-5 hours). Springtime floater traffic is heaviest along this portion of the river. The float is a casual, but exciting one, and all types of crafts are seen; rafts and inner tubes are the most popular. Canoes were seen in increasing numbers and a few kayaks were also observed. Raft launching is easy at this site because vehicle access is provided near the water and the topography is gentle.

The park was also a popular picnicking spot, containing facilities necessary for large groups. Many organizations held their company picnics at Johnsrud and it was not unusual to see groups of 150 people or more. Smaller groups also picnicked on the site. The availability of a ball field and children's play area undoubtedly encouraged groups to picnic at the park. Playing outdoor games is closely associated with picnicking at the park.

Swimming and sunbathing were also favorite day use activities. A nice sandy beach is suitable for sunbathing and relaxing but extended swimming is somewhat restricted by trecherous currents in this area.

Other less important summer activities observed at Johnsrud Park included pleasure driving, sightseeing, motorbiking, and horseback riding.

Some use was observed this winter (1976-1977) and includes snowshoeing, cross country skiing, sightseeing and fishing. In past years the park has been closed in the winter.

All corridor users were asked their favorite site on the Blackfoot River and Johnsrud Park was named more than any other site (15 times for 8.0 percent of the total).

Eighty-one Johnsrud Park users provided information about their perception of use levels; 69.1 percent felt that the present use levels were just right. Of the remainder, more users felt the site to be too crowded rather than not used enough (27.2 percent and 3.7 percent respectively). Weekend and holiday use at Johnsrud Park is very heavy at times.

Negotiations between Champion Timberlands and the Montana Department of Fish and Game are presently underway to assure adequate, long term administration of the area. Depending on the type of agreement reached--fee simple or a long term lease--money might be available from the Bureau of Outdoor Recreation's Land and Water Conservation Fund to install new facilities.

2. Champion Land (Sections 5 and 6, T13N, R16W and Sections 21 and 32, T14N, R16W).

This section of the river corridor, which has no formalized access sites, begins around the corner from Johnsrud Park and continues upstream to the first major bend in the main road. The strip of land between the road and the river is quite narrow. Most users gain access to the river by parking along the road or in five or so turn-offs, and walking down to the water. Some visitors parked at Johnsrud Park and walked into the area; others parked above this section and walked into the area. Gold Creek enters the Blackfoot River from the north within this section and access can be gained to the river by a road that follows Gold Creek. This road originates at Twin Creeks and continues through to Whitaker Bridge. The land in this section is owned by Champion Timberlands except for one 40 acre tract which is managed by the Bureau of Land Management.

Use along this part of the river was fairly heavy. Fishing was the primary activity and a number of deep holes and long riffles makes this a desirable location for this activity. Also observed on this section was some float launching, especially late in the afternoon. Presumably, campers at Johnsrud Park float this short part of the river when they do not have time for a longer trip. Although some picnicking occurs in this area the limited parking and dust from passing vehicles makes this a less than desirable spot. Camping was observed north of the river, on a large flat where Gold Creek enters the Blackfoot, despite the fact that this area was closed to this activity. Campers were observed here generally on the major holiday weekends. Visitors were also observed swimming, resting, and

sightseeing along this section. Most recreational use occurred on the south side of the river where the road is located.

Parking was no problem along the road throughout this stretch if vehicles were parked in the turnoffs and did not interfere with traffic. Visitors parked in the road should be asked to move. Patrol activities should be increased to cover the north side of the river in the vicinity of Gold Creek to prevent illegal camping and firebuilding in this area.

3. Daigles Eddy (Sections 32 and SE29, T14N, R16W).

This section of the river is also without formalized access areas but three short roads leading to the river within this section provide access and parking for visitors. As evidenced by many fire pits all three of these sites have been used for camping in the past. Some camping was observed in this section during the Fourth of July weekend. These three sites are located approximately in the bottom (south), middle, and top (north) of this section. The northern-most site which overlooks Daigles Eddy, a small set of rapids, is the most difficult of the three sites to reach by vehicle because of the large rocks. Perhaps this area should be closed permanently to vehicular traffic. Little use was observed on the railroad side (west) of the river. All the land in this section with the exception of a small portion of Burlington Northern property, is owned by Champion Timberlands.

The area between the road and the river is a large, flat bench covered with scattered trees and there is a 15-20 foot drop down to the river. Fishing was the most popular activity along the river. Some picnicking occurred because of the scenic beauty of this stretch

and adequate shade. Occasional raft launching was observed at the southern-most site where access to the water is relatively easy. Other activities observed included resting, hiking, and sightseeing. Some chokecherry, elderberry and raspberry bushes attracted berry pickers.

This area should remain as it is. The access roads provide parking and if fires and camping are prohibited, other day use activities are well suited for this area.

4. Sheep Flats (Sections 29, 28 and SW21, T14N, R16W).

This river section includes two day use access sites named in the plan (identified as sites 2 and 3). These two sites are treated as one section because they are both located on the same terrace east of the river about two miles north of Johnsrud Park. The sites are described by McGahan in detail; but site number 2 is generally more heavily vegetated than site 3. The river lies 10-15 feet below the terrace. One access road which is in fair condition enters the terrace from the main road near site 3. Another road near site 2 descends a very steep hill. The roadbed has been rutted by vehicles and is eroded. A sharp turn from the main road makes entrance to this acces road very difficult. Because access to the terrace can be gained from the north end, this badly eroded road should be closed. A third access road leaves the main road on a hill south of the terrace and descends a steep hillside to a bench above the river. To control access, this road should be closed, and parking should be provided for fishermen and hikers. Sheep Flats itself is actually a large bench on the north side of the river. Vehicle access to this flat is possible from the

Twin Creeks road and some recreationists, including campers use the road.

The terrace on the east side of the river has been used in the past for camping and a few hand-built tables and fire pits remain. Use this past summer at this area was low. Camping, on both sides of the river, continued sporadically throughout the summer. Although the area was used primarily by fishermen, some people use the site for resting and picnicking. Rafts were occasionally launched here but access to the water is difficult.

The area is a desirable camping area as evidenced by past use. The terrace should be considered as a possible overnight area to provide camping opportunity along the river where none is currently available. The Sheep Flats area should be patrolled more closely because fire would destroy valuable wildlife winter range. People have been observed camping within the railroad right-of-way as well.

5. Thibodeau Rapids (Sections SE21, S22, and NE27, T14N, R16W).

This river section is fairly large and includes both sides of the river, beginning just west of the actual rapids and extending to the Whitaker Bridge. One established access site, upstream from the rapids, is in this section on State Land (number 4). Another heavily used but informal access is at the rapids itself. An access road leads to the water a short distance north of Whitaker Bridge. Another established access point is at Whitaker Bridge (number 5) where public use occurred at all four quadrants of the river-bridge intersection. A small percentage of users were observed on the north side of the river, where there is a road which follows the river for a short

distance. About half of the land in this section is owned by the State and half by Champion Timberlands.

The access point at the rapids is an ideal site for day use activities. A sandy beach and view of the rapids drew picnickers, swimmers, sunbathers, and fishermen. Thibodeau Rapids is one of the river's finest whitewater rapids and kayakers used the site for parking and portaging. Kayakers often ran the rapids several times in succession. Visitors complained about campers at this site; in fact, on the Labor Day weekend a large party camped here. The site is small and as such, a group of campers can restrict access to the picnic area, swimming beach, and the rapids. Parking must also be further defined to restrict vehicles from the sandy beach and riverbank.

The access to the State land (number 4) is a broad terrace on the south side of the river between the main road and the river. The river channel bends around this large area, which has a history of overnight camping use. Access roads enter this site from either end. The overstory vegetation is thick in some places and more scattered in others. The open fields are often grazed by cattle and some selective logging has been done south of the main road. The State Forester is in the process of developing management plans which are compatible with the Conservation and Recreation Management Plan for not only this area but also for all other State managed land within the river corridor. The site was used primarily by fishermen and by groups partying or picnicking. Some camping also continued last summer. This area should be considered as a future potential campsite because it is public land and has natural firebreaks on either side (the river and the road).

The site itself is large enough to accommodate a considerable number of campers without an atmosphere of crowding. The steep incline to the beach (20-25 feet) would discourage vehicle traffic along the water's edge. Sanitation facilities would have to be constructed if this area was declared an overnight campground.

Both ends of Whitaker Bridge were popular raft launching spots. Neither end of the bridge is very desirable for this activity because of steep banks on one side (northwest) and no parking on the other (northeast). Between site 4 and the bridge is one small turnoff road where launching is easier, however there is little parking. Fishermen also congregated around the bridge. Parking is available on the northwest side for 8-10 vehicles without blocking the gate entering the backcountry area. Some use is made of the east side of the river, primarily along the road to Twin Creeks which parallels the river in this location. Parking on the northeast side of the bridge near the railroad tracks is a problem which must be resolved.

Fishing was the most popular activity in this area, followed by rafting and picnicking. Fishing occurred throughout the area. Rafting access was most popular at the bridge and picnicking occurred at the rapids and on the State section (site 4). Other activities also observed in this area were resting, sightseeing, camping, swimming, shooting, berry gathering, and kayaking. Pleasure driving was also popular. The areas above and below Whitaker Bridge were heavily used areas. On weekends the bridge area was often congested.

6. Red Rock Beach-Whitaker Bridge (Sections E27, and W-N26, T14N, R16W, only on the north side of the river).

Red Rock Beach is located north of the river from the rock which gives the beach its name. This site is identified as number 6 on the map. It is located on a small parcel of Burlington Northern land. Another day use access is located on the southeast quadrant at the bridge. This site lies between the railroad right-of-way and the sharp incline to the river.

The beach area has been a popular kegger, outdoor concert, and picnic area, especially with Missoula youth, for many years. In past summers the annual "Blackfoot Boogie" was held here by local Missoula businessmen. The site is a large area where the river slows and deepens. A rough road leads to the site and vehicular damage to the site is evident. The past summer, the road was closed in an attempt to keep vehicles out of the area, but was only partially successful as vehicles continued to drive into the area. Parking on the main road also created some congestion. A parking area is needed badly.

The beach was the most popular swimming hole on the river and people are attracted to it on hot summer weekends. This area is especially popular with Missoula youth and sunbathing, cliff diving, skinny dipping, beer drinking and marijuana smoking were common activities. The area was kept quite clean. The area was a popular camping area in the past and camping continued last summer despite restrictions on this activity. Fishing, relaxing, picnicking, and skinny-dipper-watching were also popular activities.

Access to the day use area near the bridge is down a steep gravel fill immediately on the northeast corner of the bridge, and the access road is tightly constricted by trees. The parking area has the capacity to hold four or five vehicles. Although the access road continues east on the terrace for approximately 300 yards, it was blocked last year to restrict vehicles from the railroad right-of-way. A large dump, located near a previous camping area was cleaned up and a picnic table was moved closer to the bridge. Some people have continued to drive the road, however. The area is heavily shaded and was a popular picnicking spot. Raft launching and take-out was also popular at this location. Fishermen often parked here and embarked up or down the river.

The remainder of this area to the east was used almost exclusively by fishermen and hikers as the road leaves the river area and climbs the hillside. The next accessible area east along the road is Belmont Creek. Some berry bushes along the road attracted berry pickers.

Other activities observed in this area included photography, rest-relaxation, sightseeing, and motorbiking. River floaters that put in at the bridge usually went to Johnsrud Park or all the way to the Bonner weigh station. Those getting out at this location usually started at River Bend, Ninemile Prairie access or the Roundup access.

This area was named a number of times as a respondent's favorite site on the river.

Restricting users from driving indiscriminately through the area and providing adequate parking are the main problems to be addressed here. Large gatherings, such as those which have occurred in the past,

should be discouraged at the beach area because they are incompatible with the recreation management plan.

7. Belmont Creek (Section SW24, T14N, R16W, on the north side of the river).

Belmont Creek enters the Blackfoot at this site. The day use area (number 9) is located along Belmont Creek a few hundred yards north of the river. This site was an extremely popular camping area in the past and many river users indicated that this was their favorite site on the river. This area has been badly abused. Road cuts are severe and subsequent erosion is very significant. Soil types are not suitable for heavy use and garbage is present in the creek and elsewhere (McGahan, 1976). Although the situation is caused primarily by over-use, cattle, which were often observed in Belmont Creek, compound the problem. Near the Blackfoot River the railroad crosses Belmont Creek over a picturesque wooden trestle and a few old railroad related buildings remain in this vicinity. Across the main road from the day use site is a cattle corral and a turnoff to the Belmont Creek road.

Illegal camping continued at this site last summer and barriers were repeatedly torn down so vehicles could be driven down to the traditional campsite. Fishing was the most popular activity. Little picnicking was observed although the site is well suited for this use in terms of shade, water, and scenery. Other activities observed were hiking, resting, and sightseeing.

Continuation of present fencing could exclude cattle from this site. Vehicles must be kept in the parking area and some erosion control work done on the old road.

8. Backcountry Area (Sections SE21, 26, and 25, T14N, R16W, on the south side of the river).

This portion of the river corridor is so named because an access road which used to extend along the south side of the river for about three miles east of Whitaker Bridge, was closed to motorized travel last summer. The area is now a non-motorized use area for hikers, campers, horseback riders, skiers, and snowshoers. Two backcountry camping areas (one at Goose Rock Flat and the second, one half mile north of this on a large flat) were identified, but were never signed. Fire building was also allowed at these two sites.

This area presented many management problems during the course of the summer. Before the gate was erected a number of car bodies and other miscellaneous junk were removed. The gate that was erected was destroyed three times early in the summer; however, after cementing in the gate posts, it still stands. U. S. Plywood crews logged in the area throughout the summer so the gate was open much of the time and recreational users complained that vehicles related to the logging operation were parked in the closed area. Problems also developed with the Fish and Game Department wardens because the road is a major patrol route. However, solutions to most of these problems were reached by the end of the summer.

In the past, this area has been used for pleasure driving, picnicking, group camping (Boy Scouts), fishing, and hunting. Some of these same activities are still popular but vehicles must now be parked near Whitaker Bridge and access gained by foot or horseback. Use of this area was reduced drastically last summer because of the vehicular closure and very few users ventured any great distance into the area.

The majority of use, most of which was fishing, occurred within a quarter mile of Whitaker Bridge. Other activities observed at this area this summer (1976) included picnicking, sightseeing, resting, swimming, camping, and hiking. Camping site number 8 is an ideal floater camping location. The area was used for hunting in the fall although probably not to the extent that it was in the past. This past winter a well worn cross-country ski trail showed evidence of this use in the backcountry area.

The road running through the backcountry area should remain closed. A logging moratorium should be placed on this area and all but a minimum amount of administrative driving (Fish and Game wardens, Sheriff, and State Foresters) allowed. This is important in terms of an eagle nest (McGahan, 1976) which is located within the area, and as an example to visitors. The site identified as number 7 should be moved to another location. All use should be discouraged in this area if the eagles return to nest. Site number 8 should be signed to designate camping and fire building locations. Floaters should be informed that camping is possible at this site. Foot patrol of this area should be increased in the future.

9. West Ninemile Prairie Flat (Sections SE24 and NE25, T14N, R16W on the north side of the river, NW30, S19 on both sides of the river and S20 on the south side of the river, T14N, R15W).

Most all of the use observed in this section of the river corridor occurred on the flat between the canyon mouth and the River Bend Campground. Some floaters use the area across from River Bend and it was identified as a backcountry camping area (unnumbered) in the

recreation management plan. No formal access sites occur in this area but a well developed road system makes the entire area north of the river accessible for day use activities. The large flat is open in places and tree covered in others. Across the river, cliffs drop to the water providing a scenic backdrop for recreationists. Fishing is good along this stretch. Evidence of past camping use includes fire pits and tin can dumps.

Some camping continued this past summer, particularly when the River Bend Campground was crowded. In fact, much of the use of this area was by campers staying at River Bend. Fishing was the most popular summer activity. Picnicking and rest and relaxation were also popular. Swimming and insect collecting were also observed.

In addition to unauthorized camping, sign vandalism and target shooting were two problems in this area. Shooting restrictions should be publicized better in this area because of the presence of livestock and large numbers of users.

10. River Bend Campground (SE19, SW20, T14N, R15W).

This site is located on a terrace within a large bend on the river at the west end of Ninemile Prairie, approximately 6 miles west of Highway 200, and 5 miles east of the Whitaker Bridge. The site is owned by Champion Timberlands and has been used for camping and river access for many years. There are no developments at River Bend. It was designated as one of the three riverside campgrounds last summer and is well suited to such use (McGahan, 1976).

The camping area is located near the water. A steep incline, which forms the northern border of this level terrace is an old river

bank and shelters the campground from road noise. The area is well shaded with an overstory of mature Ponderosa Pine. The flat upper terrace is open with the exception of a few trees around the edge. Wildflowers blooming in the spring makes this flat a colorful attraction.

This past summer the site was signed to indicate it was an overnight area. Signing also urged the public to keep it clean. No other developments existed. However, many more people used River Bend this summer than in the past because camping availability elsewhere in the corridor was limited. Most weekends and holidays the park was heavily used. Sanitation problems developed although a large number of self-contained campers and trailers use the area. Misuse of the site increased with the crowding and many live trees were cut down. Sign vandalism also occurred. Rutted beaches and a scarred terrace incline indicate vehicular misuse. More than one vehicle was towed out of the sand last summer and vehicles have been observed parked in the water. Minimal site protection work in the form of barriers was completed to keep vehicles off the beach area. Cattle, often in large numbers, use the campground; however, natural barriers exist on three sides of the campground, therefore fencing would be relatively easy.

The park is the second most heavily used campground on the river and is most popular on summer weekends. It is primarily used by Missoula residents who camp, fish, and float. Large family groups often assembled here for weekend camping outings. Fishing pressure was particularly heavy along this stretch of the river because of intensive camping activity. This area is one of the few good sites in the Ninemile Prairie for floating access. Groups often float from

here to Whitaker Bridge or Johnsrud Park. Groups who put in at Scotty Brown's Bridge, the Clearwater-Blackfoot confluence or at the Roundup access often take out here. Organized camp and school groups often use this site for floating access. Other activities observed at this site included sightseeing, motorcycling, resting, and canoeing. Weekday use was light.

Minimum facility development is necessary at River Bend to protect the site from overuse. Toilet facilities must be provided and vehicular use restricted to existing roads. Visitors indicated an overwhelming desire to leave the site in its natural state, so facilities should be unobtrusive and minimal.

A master site plan should be developed for River Bend to retain the present natural qualities and yet allow rather intensive camping use. Present negotiations between Champion Timberlands and the Fish and Game Department should continue. Public agency administration of this site would assure proper recreation management.

11. Sullivan Homestead (Sections 20, 21, and 28 south of the river, T14N, R15W).

This section has no formal access sites although a few roads leading down to the water are used for this purpose. The Lindbergh Cattle Company owns the majority of the land and Champion Timberlands own one small parcel. The area on the north side of the river near River Bend slopes gently to the river. The riverbanks near the Ninemile Prairie Fishing Access Site are more steeply inclined. On the south side of the river downstream from the Ninemile site is a cabin lease on the Lubrecht Forest. Little public use is made of the south side of the river. The light use in this area is primarily by

fishermen, many of whom camp in River Bend. Some camping overflow from River Bend occurred in this area during the Labor Day weekend. Some picnicking and sightseeing was also observed during the summer.

Parking should be allowed on the turnout roads off the main road. A road cut in the Champion parcel leads down to the river and would make an excellent floating access site. The Ninemile Prairie site could be expanded to this small parcel. Little timber exists on the site except along the riverbank. The Department of Fish and Game should be encouraged to purchase or lease this small parcel from Champion Timberlands.

12. Ninemile Prairie Fishing Access Site (Section 28, T14N, R15W).

The Ninemile Prairie Fishing Access Site is a 14 acre park managed by the Montana Department of Fish and Game. The park which has some facility development has been in public ownership since 1960. The site is extremely rocky (large boulders) and virtually treeless except for one large spreading ponderosa pine. A few trees also grow along the riverbank. The site is located on a bench above the river and a steep incline (50 feet) leads to the water. A very small portion of the site is actual river frontage and the area distant from the riverbank, is used very seldom. The facilities, which were developed with matching funds from the Land and Water Conservation Fund Act, consists of restrooms (2), picnic tables, and fire pits.

The site, frankly, is one of the least desirable in the Ninemile Prairie for recreational use and river access. In past summers very little use, especially camping, was made of the park. However, with camping availability restricted to established campgrounds, use

increased dramatically this summer, although it is still low at this site compared to Johnsrud Park or River Bend. The desirable camping locations (around the large tree) are few. The remainder of the park is too open or too rocky for camping with the result that only three or four groups ever use the park at one time, with the possible exception of holiday weekends. The steep bank and fast water in this area makes this site undesirable for floating access. Irregardless, many floaters use this area as a put-in or take-out site. Organized groups such as Campus Recreation from the University of Montana and the Missoula city recreation department use this site frequently for large raft trips. Kayakers often take out here after running the rapids between Roundup and this site. Acquisition of a site next to the park discussed in the previous section would better serve floating activity. The main benefit of the Ninemile Prairie site is in providing access to the river corridor across public land in an area where private land is posted. Fishermen utilize this opportunity to gain entry to the river and as such they were the most observed group using the park. Camping, rafting, and picnicking were also popular. Visitors were also observed sightseeing and relaxing at the park.

Most all of the use of this area was by Missoula residents on weekends. A large percentage of the camping use at this park was by visitors with fully contained trailers or campers. Some groups were observed at this site every or every other weekend throughout the summer.

McGahan warns of the fragility of the steep, rocky banks leading to the river and evidence of erosion is apparent at this site. Another

problem lies with vehicles parking directly under the large tree. Further compaction of the soil may spell the demise of this attractive patriarch.

13. Collins-Vannoy Land (Sections NE28 and S27, T14N, R15W).

Access to the north side of the river is restricted in this section by the small private landowners. The Lubrecht Forest lies on the south side of the river but little use was observed in this area last summer.

The Collins property is split by Vannoy land. A small cabin (caboose) occupies Collins' western-most parcel of land and Vannoy grazes cattle on most of his river frontage. Collins' eastern-most tract of land is heavily timbered with second growth ponderosa pine. This area would make a good shaded campground if the land could be acquired by a public agency. This entire section is posted to trespass so access must be gained to the river corridor at either the Sunset Landing (Milwaukee Road property) or at the Ninemile Prairie FAS.

The little use occurring on this section was primarily from fishermen. Some picnicking and camping was observed in the wooded portion of the section, especially on weekends. Only one questionnaire respondent was contacted in this area. This was one of the most lightly used portions of the river corridor.

14. Sunset Landing (Sections S26 and 25, T14N, R15W).

This river section contains no formal access site although the area is moderately used. A formal day use site has been proposed on Milwaukee Railroad land. Other land in this section is owned by the Morris estate and the Lindbergh Cattle Company. An access road

leads from the main road down to the river where the old highway crossing is still marked by bridge piers. From the old bridge site another road leads upriver for approximately a mile. Most of the area away from the river is open prairie, while the area along the river is tree covered. In low water, sandy beaches are exposed. Tin can dumps and many old fire pits indicate past camping use. This section of the Blackfoot River contains a long series of interesting rapids, reaching from Roundup to the Ninemile Prairie Fishing Access Site, and is very popular with whitewater floaters. Access to the river is down a steep incline. Although some use was observed on the south side of the river, the majority of activity occurred on the northern bank.

Fishing was very popular along this stretch and less so was picnicking. Some fishermen were observed using this section on the south side of the river, but most used the north side. Some illegal camping also occurred on weekends. Other visitors were observed bird-watching, relaxing, and sightseeing. On most occasions, use pressure along this portion of the river corridor was light to medium.

This area would make an excellent place for a work project to clean up some of the old trash dumps. Members of Trout Unlimited spent two weekends last fall cleaning this area, and although they made some improvements, more work is necessary. Restrictions on unlimited vehicle use may also be desirable. A parking area to accommodate vehicles near the river should be developed near the Sunset Landing.

15. Roundup Access (Section 25, T14N, R15W).

This access point is located in the northwest quadrant formed by the junction of Highway 200 with the Blackfoot River. Elevation of

the river here is about 3,700 feet. The Roundup Access (number 12) is located on property owned by the Lindbergh Cattle Company. An area which has historically received heavy use, in the northeast quadrant at the bridge, was closed this past year because of resource damage and a lack of adequate parking space. The two quadrants on the south side of the bridge where some parking had occurred were also closed in order to consolidate use and parking in one area. Vandals frequently removed these barriers and parking continued on the south side of the bridge throughout the summer.

The present access site was previously used for camping. A restroom was installed on this site and a parking area capable of holding 10-15 cars was developed. Parking barriers donated by the nearby K & L Mill and rail fences were also constructed to keep vehicles on the developed roads. The access site is generally open with some shade along the riverbank. A vegetation barrier of juniper and small pine trees shelter the site from the residential development north of the main road. In low water a small, sandy beach is exposed near the bridge. Poison ivy grows amongst the boulders on the beach. The old access site east of the highway is easily accessible from the new site by a short 50-yard trail under the bridge.

One of the most beautiful and most difficult rapid sections on the Blackfoot River begins a quarter of a mile above this bridge and extends downriver to the present access site. This section is very popular with kayakers and they will often run it many times a day. A problem exists with fences that lie within the high water mark upstream from the bridge. The fences make portaging around the rapids

very difficult and dangerous. People have been injured attempting to negotiate the fences when carrying river crafts.

Most use occurs in the access site except for foot traffic portaging around and above the rapids. The site was one of the most popular float launching places (for rafts, canoes and kayaks) along the river. The site also attracted a lot of highway travelers. About half of the groups observed here were tourists. They most frequently stopped for only a short time to picnic or rest. Fishing was also very popular in this area and occurred on both sides of the river. Although parking was restricted on the south side of the river, people continued to tear down the barriers rather than park where space was provided and walk across the bridge (which has no pedestrian walkway). Fishermen made the most use of the south side of the river. Other uses observed at the access site were swimming (in low water) and photography.

This site was frequently mentioned at the second public hearing concerning the problems which have already been discussed. Citizen input from river users should relieve these problems to the satisfaction of all parties concerned. McGahan warns that parking should not extend too close to the river, so the old access should remain closed to vehicle traffic. Cooperation with the state highway section in closing the two southern quadrants at the bridge is desirable.

16. Hunters Point (Sections 19, 30 and 29, T14N, R14W).

This river section extends from the head of the rapids above the Roundup Access to the Swallow Cliffs (near site 13a - Sunset Hill) on both sides of the river. This section is entirely on Lindbergh

Cattle Company land (located within this section is part of their irrigation pumping system on the north shore). The north shore is less vegetated than the south side; boulders and sandy beaches are common on both sides. The fish habitat appears excellent.

This section was used almost exclusively by fishermen, both from the riverbank and from rafts. Very little shore-related recreation was observed in this area. All users observed in this area parked at the Roundup Access and walked upstream to fish. Some evidence of past fire building (fire pits) can be seen along the shore and some shooting was heard along this stretch. The low use of this area can probably be attributed to the lack of vehicle access.

Shooting must be controlled in this area because of the irrigation systems and sightings of eagles and ospreys. Obstructions (fences) to corridor access should be modified to allow easier travel along the river.

17. Sunset Hill (Sections 28 and 21, T14N, R14W).

This section of the rvier extends from the bottom of Sunset Hill upstream to the vicinity of the E Bar L Ranch irrigation pump. All the land within this section is owned by the E Bar L Ranch. Within this section is one formal access site (13a). This site, a 3-car parking place, is located on the riverbank at the point where the Sunset Hill Drive leaves the river. A trail leads from the parking area to the river. Tree and shrub cover is fairly heavy in the vicinity of the parking area. The remainder of the section consists of a thin strip of land between the road and the river on the east side and a narrow corridor between the river and the railroad tracks on the west

bank. It is possible to wade across the Blackfoot River in this section during the late summer. This section of the river has many fine fishing holes and is designated as a public walk-in fishing area (number 14). Parking is restricted to the designated parking areas located at the Sunset Hill (13a) and at the confluence of the Blackfoot and Clearwater Rivers (13b). Use is restricted by the number of available parking slots.

The access site (13a) is used almost exclusively by fishermen. This location is especially popular for float-related fishing, as the river in this area is very productive. Site 13a is used as both a put-in and take-out area for rafts, inner tubes, some canoes, and a few kayaks. Fishing use was heaviest upstream because the Swallow Cliffs impede access downstream, and most activity occurred on the roaded side of the river, particularly when the water level was high. Wildlife was often observed from the Sunset Hill Road in the mornings and evenings. Visitors have also been observed sightseeing, horseback riding, hiking, and relaxing within this section. The heaviest use periods in this section were the holiday weekends and weekend use greatly exceeded weekday use in the summer.

Located on a terrace to the east of the road is one of the oldest operating guest ranches in Montana, the E Bar L. Begun in the 1930's, the operation caters mainly to tourists from out of state. A significant portion of the use in this river section was related to the commercial operation of the guest ranch. The surrounding ranch lands and the river are used by the guests for fishing, swimming, floating, tubing, nature study, hiking, and horseback riding.

The remainder of the use in this section was primarily by Missoula residents. The Sunset Hill Drive was the original highway up the Blackfoot River and this scenic route still evokes sentimental recollection by older Missoula residents who have been using the river for many years. This area is seldom discovered by passing highway tourists.

The Blackfoot River recreation management project and a walk-in special management hunting area, administered by the Department of Fish and Game, overlap along the Sunset Hill Road, and these two designations created some confusion among the public last summer. The land along the road is a safety zone in the walk-in hunting area and as such, is posted against trespass. These signs confused people who sought access to the river. By covering the "no trespassing" portion of the safety zone sign, some of the confusion was reduced. Standardization of the two project objectives along this section of the river would further reduce confusion. The river is accessible on foot along the entire road except in the vicinity of the E Bar L irrigation system. In the future, another small (3 or 4) car parking area may be desirable near the middle of this section. The county has ceased to widen the Sunset Hill Road during summer grading so conflict over this procedure between the county roads department and the landowners should be reduced.

18. Clearwater Confluence (Sections SW16, T14N, R14W, and the lower Clearwater River from Montana Highway 200 to its confluence with the Blackfoot River).

The access site (13b) is located at the confluence of the Blackfoot River and the smaller Clearwater River. This site is owned

by the Lindbergh Cattle Company. Most of the remainder of the lower Clearwater River is bordered by E Bar L lands. A seven-vehicle parking area, designated as a fishing access site, has been provided adjacent to the county road. This location was one of the first sites within the now-formed recreation management area to be closed to camping and fire building a few years ago by the private landowners. Vandalism, unruly campers, trespass, and livestock harassment forced the closure of this area to vehicle access, campfires, and overnight camping. Other day uses are still permitted. The area consists of a lower terrace on the northern end of the site that borders the river along moderately-inclined slopes, and an upper terrace northeast of the confluence bordered by a steep bank above the river (McGahan, 1976). The area is well shaded and evidence of past use (fire pits, car bodies, rutted roads, etc.) can be found both near the Clearwater River and also upstream from the bridge on the Blackfoot. Vehicle access has been restricted by fencing, but gates and stiles allow foot travel. The bridge which crosses the Blackfoot River at this site is a favorite spot with older residents in the area. A small community used to exist where these two rivers merge, but only some decayed log buildings remain.

Most of the use observed in this area occurred in the vicinity of the confluence. Some use was also observed along the Clearwater River south of Highway 200. Much of this use was from campers parked in the Clearwater Crossing fishing access site. Weekend use in the entire area was much greater than during the weekdays. Only once during the summer, on the Fourth of July, were all the parking slots full at 13b. Signing at either end of the road through this section of

the river corridor was an effective method of informing users about parking restrictions along the road. Much of the use along this area was by Missoula residents. The out of state visitors that use this area generally camp at Clearwater Crossing or Harpers Lake. Other out of state visitors observed in this area were guest ranch clients.

The parking area is used primarily by fishermen and rafters. Some fishermen rate this area as one of the best on the river and float fishing is popular. This area has been suggested as part of a "fly fishing" only segment of the Blackfoot River. Some use was made of this area for picnicking, resting, driving for pleasure, and sightseeing as well. Horseback riding was popular among guest ranch visitors in this area. Wildlife viewing is good in the summer and the area was used by hunters in the fall. This area was named by many river users as their favorite location on the Blackfoot River.

One problem resulting from the limited parking in this section is that floater groups leave their vehicles for long periods of time while they are floating the river. A time limit restriction may have to be enacted for the two parking areas to allow everyone an equal chance to use the area. The areas previously used by campers and picnickers should remain closed and any existing litter should be hauled away. The road which leads up river on the Blackfoot to the Lindbergh homesite, should remain closed to all but the area landowners.

19. Clearwater Crossing Fishing Access Site (Section 4, T13N, R14W).

This park (number 13) is located on the Clearwater River at Highway 200 about one-half mile west of the Clearwater Junction. It is not within the Blackfoot River corridor per se, but was identified as

a public use area affected by the recreation management plan. Because this site is managed by the Department of Fish and Game, overnight camping use in the upper river corridor was directed to this area and the Harpers Lake area (Recreation Management Plan, 1976). These two areas were included in the study because of their relevancy to the overall use patterns in the Blackfoot River corridor.

The public campground is a small area on the north side of Highway 200. The Clearwater River bends around the park on two sides, the Blackfoot-Clearwater Game Range borders the third side and the highway borders the fourth side. An irrigation canal runs through the park and clumps of cottonwoods provide shade along the ditch and along the river. The remainder of the park is treeless. The park is signed on Highway 200 and contains restrooms, picnic tables, garbage cans, fireplaces and is maintained daily throughout the summer.

The park was used as a highway rest stop as much or more than as a camping area. Many visitors contacted at the park were vacationers. Out of state tourists accounted for the greatest percentage of the vacationers. Although a few groups were observed at the area for over a week, most of the overnight campers were travelers in transit and it was unusual to see a group spend more than one night in the park. Generally, the longer staying parties consisted of fishermen who utilized the lakes and rivers in the area, including the Blackfoot. The use of the park was about 60 percent by Montana residents and 40 percent by non-residents.

Camping was the most frequently recorded activity in the park followed by fishing. Much of the camping was done in trailers,

campers, and recreational vehicles. On one summer weekend, a convention of 20-30 Airstream trailers camped here. Camping use was spread throughout the week but was heaviest on weekends. Usually no more than five or six groups camped overnight on any given night. Much of the fishing use was by campers. Above the park, an irrigation diversion impounds the river and fisherman used this area as well as the meandering river below the park. The park was also used by picnickers, swimmers, and hikers. Bicyclists were observed camping here. Resting and sightseeing were also popular activities.

20. Harpers Lake Fishing Access Site (Section 28, T14N, R14W).

This area (number 18) is also located on the Clearwater River, upstream from the Clearwater Crossing. Access to Harpers Lake is from Highway 207. The Department of Fish and Game manages the site which is located on the Blackfoot Clearwater Game Range. The park encompasses three different areas. Harpers Lake is a small, shallow lake with no inlet or outlet. No motorized crafts are allowed on the lake and the lake is frequently stocked with fish. Underwater springs and a rich population of crayfish normally allow the fish to survive the winter, but occasionally the lake freezes out. The access point on the lake is a large, open flat. A few trees grow around the lake. Facilities in this area include restrooms, garbage cans, picnic tables, and fire pits. A second lake in the area (Blanchard Lake) is really a large bend in the Clearwater River. A parking area is located on this lake. Upstream of this lake is the third area, a campground along the river. This site is shaded by mature pines and aspens. Facilities in this area include a campground with pull-outs, garbage cans, picnic tables,

fire grills and restrooms. Trails lead upriver from the campground. The entire area is maintained on a regular basis throughout the summer.

Harpers Lake is a tremendously popular area with Missoula residents. It is the most heavily-used site within the study area, with the exception of Johnsrud Park. The large size of this area can accommodate many visitors, many of whom are highway travelers seeking either an overnight camp spot or a brief rest stop. The park is particularly popular on weekends, but weekday use can be great at times.

Harpers Lake itself seems to be the main attraction in this area. Fishing is often good for large hatchery fish and the lake is fished virtually everyday of the summer. The fishing pressure is equally distributed between boats, rafts or canoes, and the shore. Ice fishing in the winter is also popular. Many people camp on the lake and fish for the weekend. The area is used a great deal by retired visitors who often stay the maximum allowable 14-day limit. Swimming and picnicking are popular at Harpers Lake. Blanchard Lake is most popular with fishermen, but much less so than Harpers Lake. Rough fish are plentiful in Blanchard Lake and this may be the reason it is fished less. The campground along the Clearwater River is a very scenic and desirable place to camp. Many of the campers at Harpers Lake and in the campground use self-contained units (recreational vehicles, trailers, etc.), but tent camping is also popular. Some vehicles drive off the campground road and park along the river. This activity should be restricted. Fishermen, picnickers, company organizations, and floaters also used the campground. Eagles and ospreys

were often seen at Harpers Lake and along the river. Bears are known to frequent the campground in long, hot summers.

Looking at the entire Harpers Lake complex, fishing was the most popular activity. Missoula residents accounted for the majority of this activity participation. Camping was the second most popular activity, followed by resting, boating, and picnicking. Camping use was about equal between residents and non-resident users. Swimming, sightseeing, and rafting (both in the lakes and on the river) were frequently observed. Less frequently observed were canoeists and motorbikers.

The largest number of questionnaire respondents were contacted at this area (103). Some visitors (especially non-residents) were reluctant to participate in the survey because they felt that either they didn't use the Blackfoot River or they knew little of the proposals to protect the resources. Subsequently, some that did participate in the survey did not provide much information.

21. Conservation Reserve (Sections E16, 15, 10, 11, 2 and 1, T13N, R14W).

The conservation reserve, a non-roaded section of the Blackfoot River corridor, is located between the confluence of the Clearwater and Blackfoot Rivers and Sperry Grade to the east. This is the largest area of the corridor sampled as one river section and involves land owned by the E Bar I Ranch, Land Lindbergh, Champion Timberlands, and the State School Trust. The State-owned section at Sperry Grade and the County Line Park will be discussed separately in the following pages.

This area is important to the Blackfoot River's ecosystem and it provides habitat and niches for bald eagles, blue herons, ospreys, beavers and elk (Nature Conservancy, 1976). State land in this section, as elsewhere along the river, will be managed by the Division of Forestry, Department of Natural Resources, to be compatible with the objectives of the plan. The reserve will be established on private parcels through conservation easements.

I will not describe the geographical features of this large area in this report; the reader will please refer to McGahan's report which does so in detail. Forested areas, meadows, cliffs, old cabins, and a steep riverbank generally characterize this very scenic area. From the confluence one road extends east to the Lindbergh property, and another road parallels the river from Sperry Grade to the old Bear Creek Bridge. Both roads are closed to vehicular used except for administrative purposes, and these road closures effectively make the reserve a walk-in area.

The large reserve is treated as an entire section because most of the recreational uses are concentrated at either end. Floaters do utilize the middle part of the reserve much more than hikers, but use is still relatively light compared to other areas in the corridor.

The conservation reserve is used almost exclusively by fishermen, and the majority enter the area from the confluence (13b) where a seven car parking lot exists. Last summer the bank fishermen who entered the reserve from this end seldom hiked upstream further than the Lindbergh property. Fishermen that enter the reserve from the Sperry Grade end seldom hike further than the vicinity of the old Bear Creek Bridge pilings.

Floating use through this section is much lighter than on the lower river but nevertheless this activity is popular. The scenic attractions of this area are outstanding. This section also contains long series of exciting whitewater rapids. Rafting is the most popular means of river travel, but the whitewater sections attract kayakers and canoeists as well. Floaters usually put in at Sperry Grade (15), the County Line (16) or at Scotty Brown's Bridge and take out at the confluence (13b) or at Sunset Hill (13a). Floaters use the corridor through the reserve, mainly for fishing, the challenge of rapid running, and sightseeing. Increasing numbers of floaters however, are picnicking and camping along this section, and problems related to these uses (fire building and trespass) have resulted.

This area is also within the special management walk-in hunting area and is used extensively during the fall for this activity. However, most of the hunting in the fall occurred outside the river corridor boundaries.

The scenic beauty of this area also attracted a few summer hikers and the E Bar L guest ranch frequently conducts horseback rides through this area during the summer.

Float-related camping is a problem because there are no designated overnight camping areas along the river in this portion of the river corridor, and many users expressed a desire to camp here. Establishment of a formal camping site somewhere along this section--possibly on State land--would reduce this problem. Increased patrol of this area should also help control unauthorized camping and fire building. Vehicle access on the existing roads in the reserve must be restricted to administrative purposes.

22. Sperry Grade (Section 36, T14N, R14W).

This State School Trust section which is bordered by Highway 200, is located approximately two miles east of the Clearwater Junction. The portion of this section of land bordering the river has been divided into lots for cabin leases and constitutes the only homesite or cabin development along the Blackfoot River management corridor. Located within this section is the Clearwater Unit Headquarters of the State Forester, 22.9 acres of cabin leases (10 lots), and a formal recreation access site (number 15). The recreation access area is actually three reserved cabin lots that are located between existing cabins. The State Forester describes the recreation sites as follows: Lot 5 of this area (2.56 acres) is an open area best used for day-use picnicking. There are only a few trees on this area and it is most usable by the public on fair, calm days. Lots 10 and 11 have good access to the Blackfoot River with an adequate beach area. Present improvements consist of one outhouse and a picnic table. Lot 16 also provides access to the river; however, as with Lot 5, there is a bank with a relatively steep 20 foot drop to the river making access somewhat difficult. It is planned that the Sperry Grade Recreational Area remain as a day use area.

The cabin sites are licensed to individuals for the purpose of constructing a recreational cabin and facilities which will enhance the value of their cabin site license. The State Forester administers the leases on this site. The negative aesthetic impact and the impediment to access along the river are the most undesirable aspects of the cabin developments, although there appears to be little direct conflict between recreationists and license holders.

Recreational use at the Sperry Grade site is lighter than at any other formal access site in the corridor. Very few users were ever observed on this site and no questionnaire respondents were contacted here. The site went unused for many days at a time and the little use that did occur was normally on weekends. The light use can be attributed to both a lack of knowlege about available public access at this location and also the availability nearby of more desirable day use areas. All use observed here was by Montana residents. Fishing and floating access were the only observed uses made of this site last summer, although Paul May, the Clearwater Unit Forester, has stated that some picnickers also use the area. Rafters, canoeists, and kayakers were all seen putting in at his location. Campers were observed here during the hunting season.

The possibility of phasing out the cabin site leases over a long term should be explored to restore this area to a more natural condition. The area of this section lying on the east side of the river may be the logical location for floater camping area. Located on public land, across from the State Forest Unit Headquarters, this site is ideal for summer fire building and camping where supervision can be exercised.

23. County Line Park (Section S25, T14N, R14W).

This site (number 16), located very near the Missoula-Powell County line, is the eastern-most area included in the recreation use survey. The site lies between the river and Highway 200 and is on land owned by Champion Timberlands. A lowland terrace and flood plain support a meadow parkland and a marshy area of dense shrubbery.

Overstory vegetation on the western part of this area consists mostly of ponderosa pine. A dirt access road from Highway 200 forks, and approaches to within approximately 20 feet of the river in two different locations (McGahan, 1976). The site is signed to indicate it is a day use only area. Other signing urges the public to keep the area clean. No other facilities exist. An old railraod cut and power line right-of-way cross the area. An osprey nest across the river is visible from the site and other nesting trees are located in the general area. Waterfowl frequent the marshy area east of the park.

As evidenced by rutted roads, some litter, fire pits, and a junked vehicle, heavy use has occurred on this site in the past. Many factors, including the presence of ospreys, the fragile riverbanks and the unstable soil type indicates that increased use of this area should be restricted.

The use observed at this area last summer was not particularly heavy. It is generally used on weekends, by Montana residents, especially visitors from Great Falls and Helena. Some highway travelers also used the site.

Fishing was the most common activity at this site but rafting was also very popular. This location was a favorite put-in spot for river floaters and float-fishermen. Swimming, picnicking, and relaxing were also popular. Some campers continued to use this area last summer despite restrictions against such activity. A few untended fires had to be extinguished at this site as well.

Extensive vehicle traffic throughout this area has resulted in many rutted trails, and even the beach itself is tracked occasionally.

Discarded vehicle parts and tin cans are often tossed in the brush by persons who repair their vehicles at this site. Missoula County removed a few junked vehicles from this site this past spring. A parking area should be provided near the highway, and vehicle use restricted in the park. These same provisions should also be instituded at another access road which leads to the river just east of this site in Powell County. This area should not be designated as a campground if floater camping can be provided further downstream (see discussion of Sperry Grade, number 15). The nesting ospreys, wildlife habitat, and preservation of the natural character of the area should be of primary concern.

Table 34. Questionnaire respondents contacted at each river section in the Blackfoot River management area, by residence, 1976.

| River Section | Residence of User: Montana Resident (N=377) | Residence of User: Out of State Visitor (N=98) | Total (N=475) | % |
|---|---|---|---|---|
| 1 | 60 | 24 | 84 | 17.7 |
| 2 | 9 | 1 | 10 | 2.1 |
| 3 | 13 | 2 | 15 | 3.2 |
| 4 | 7 | 2 | 9 | 1.9 |
| 5 | 39 | 8 | 47 | 9.9 |
| 6 | 16 | 8 | 24 | 5.1 |
| 7 | 12 | 1 | 13 | 2.7 |
| 8 | 8 | 1 | 9 | 1.9 |
| 9 | 7 | 4 | 11 | 2.3 |
| 10 | 22 | 4 | 26 | 5.5 |
| 11 | 3 | 1 | 4 | 0.8 |
| 12 | 7 | 1 | 8 | 1.7 |
| 13 | 2 | 0 | 2 | 0.4 |
| 14 | 11 | 4 | 15 | 2.5 |
| 15 | 16 | 2 | 18 | 3.8 |
| 16 | 3 | 1 | 4 | 0.8 |
| 17 | 8 | 1 | 9 | 1.9 |
| 18 | 10 | 4 | 14 | 2.9 |
| 19 | 17 | 12 | 29 | 6.1 |
| 20 | 87 | 16 | 103 | 21.7 |
| 21 | 11 | 3 | 14 | 2.9 |
| 22 | 0 | 0 | 0 | 0.0 |
| 23 | 9 | 1 | 10 | 2.1 |
| Total | 377 | 98 | 475 | 100.0 |

Table 35. Average days spent at a particular site during each of the four seasons, by Blackfoot River users, 1976.

| River Section | Number of Respondents (N=401) | Season[a] Spring | Summer | Fall | Winter |
|---|---|---|---|---|---|
| 1 | 68 | 2.4 days | 6.1 days | 1.3 days | 0.4 days |
| 2 | 9 | 6.0 | 11.0 | 5.8 | 1.8 |
| 3 | 14 | 3.0 | 10.0 | 2.0 | 2.0 |
| 4 | 7 | 1.9 | 7.5 | 4.3 | 0.8 |
| 5 | 39 | 3.4 | 10.8 | 5.6 | 1.7 |
| 6 | 19 | 3.0 | 7.3 | 3.3 | 4.8 |
| 7 | 11 | 0.9 | 4.7 | 3.5 | 0.3 |
| 8 | 7 | 1.7 | 6.4 | 4.0 | 2.9 |
| 9 | 10 | 2.6 | 12.6 | 3.2 | 1.1 |
| 10 | 20 | 0.3 | 5.9 | 0.5 | 0.1 |
| 11 | 4 | 1.3 | 18.5 | 2.0 | 0.0 |
| 12 | 5 | 0.4 | 3.0 | 0.8 | 0.0 |
| 13 | 2 | 0.0 | 10.0 | 0.0 | 0.0 |
| 14 | 12 | 2.3 | 18.8 | 5.0 | 3.5 |
| 15 | 17 | 2.4 | 11.9 | 4.2 | 0.1 |
| 16 | 3 | 1.7 | 2.7 | 1.3 | 0.6 |
| 17 | 9 | 0.0 | 2.2 | 0.4 | 0.0 |
| 18 | 13 | 0.4 | 6.5 | 0.3 | 0.0 |
| 19 | 20 | 1.9 | 7.0 | 2.1 | 0.9 |
| 20 | 90 | 1.3 | 6.8 | 1.2 | 0.6 |
| 21 | 14 | 3.4 | 5.5 | 3.4 | 1.0 |
| 22 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 8 | 0.3 | 1.8 | 1.5 | 2.1 |

[a]The four seasons are defined as follows: Spring (March 20-June 20)
Summer (June 21-Sept. 22)
Fall (Sept. 23-Dec. 20)
Winter (Dec. 21-March 19)

Table 36. Perception of site use levels by Blackfoot River users, by river section, 1976.

| River Section | Number of Respondents (N=463) | Site Use Levels | | |
|---|---|---|---|---|
| | | Too Crowded % | Just Right % | Not Used Enough % |
| 1 | 81 | 27.2 | 69.1 | 3.7 |
| 2 | 10 | 10.0 | 80.0 | 10.0 |
| 3 | 15 | 40.0 | 60.0 | 0.0 |
| 4 | 9 | 44.4 | 44.4 | 11.1 |
| 5 | 46 | 37.0 | 63.0 | 0.0 |
| 6 | 27 | 30.4 | 69.6 | 0.0 |
| 7 | 12 | 8.3 | 91.7 | 0.0 |
| 8 | 9 | 22.2 | 77.8 | 0.0 |
| 9 | 11 | 9.1 | 72.7 | 18.2 |
| 10 | 25 | 32.0 | 68.0 | 0.0 |
| 11 | 3 | 66.7 | 33.3 | 0.0 |
| 12 | 7 | 28.6 | 57.1 | 14.3 |
| 13 | 2 | 0.0 | 100.0 | 0.0 |
| 14 | 12 | 33.3 | 58.3 | 8.3 |
| 15 | 17 | 17.6 | 76.5 | 5.9 |
| 16 | 4 | 0.0 | 75.0 | 25.0 |
| 17 | 9 | 0.0 | 100.0 | 0.0 |
| 18 | 14 | 28.6 | 71.4 | 0.0 |
| 19 | 28 | 3.6 | 82.1 | 14.3 |
| 20 | 102 | 21.6 | 78.4 | 0.0 |
| 21 | 14 | 28.6 | 71.4 | 0.0 |
| 22 | 0 | 0.0 | 0.0 | 0.0 |
| 23 | 10 | 30.0 | 70.0 | 0.0 |
| Total | 463 | 24.6 | 72.1 | 3.2 |

Table 37. Preference for facility development of Blackfoot River users, by site, 1976.

| River Section | Number of Respondents (N=457) | Facility Development Preference | |
|---|---|---|---|
| | | More Facility Development % | Left As Is % |
| 1 | 78 | 17.9 | 82.1 |
| 2 | 10 | 10.0 | 90.0 |
| 3 | 15 | 13.3 | 86.7 |
| 4 | 9 | 0.0 | 100.0 |
| 5 | 46 | 15.2 | 84.8 |
| 6 | 23 | 13.0 | 87.0 |
| 7 | 13 | 0.0 | 100.0 |
| 8 | 8 | 0.0 | 100.0 |
| 9 | 11 | 27.3 | 72.8 |
| 10 | 26 | 7.7 | 92.3 |
| 11 | 3 | 0.0 | 100.0 |
| 12 | 8 | 25.0 | 75.0 |
| 13 | 2 | 0.0 | 100.0 |
| 14 | 12 | 8.3 | 91.7 |
| 15 | 18 | 5.6 | 94.4 |
| 16 | 4 | 0.0 | 100.0 |
| 17 | 9 | 22.2 | 77.8 |
| 18 | 14 | 21.4 | 78.6 |
| 19 | 29 | 10.3 | 89.7 |
| 20 | 96 | 13.5 | 86.5 |
| 21 | 14 | 7.1 | 92.9 |
| 22 | 0 | 0.0 | 0.0 |
| 23 | 9 | 0.0 | 100.0 |
| Total | 457 | 12.7 | 87.3 |

Table 38. Aspects of site liked by Blackfoot River users, 1976.

| Aspects of Site Liked | River Sections | | | | | | | | | | | | | | | | | | | | | | | Total Respondents (N=372) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| uncrowded | 4 | 2 | 1 | 1 | 10 | 5 | 0 | 1 | 6 | 5 | 0 | 1 | 0 | 2 | 2 | 0 | 1 | 0 | 4 | 6 | 2 | 0 | 1 | 47 |
| quiet-peaceful | 7 | 0 | 1 | 1 | 2 | 0 | 1 | 1 | 1 | 5 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 5 | 15 | 0 | 0 | 0 | 42 |
| scenic beauty | 15 | 2 | 2 | 1 | 7 | 0 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 4 | 0 | 3 | 0 | 0 | 1 | 44 |
| vegetation | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 5 |
| water purity | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 7 |
| rocks | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| accessible from road | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 14 |
| access to river | 2 | 0 | 4 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 3 | 16 |
| site near water | 6 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 3 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 3 | 0 | 0 | 0 | 21 |
| close to Missoula | 6 | 2 | 0 | 1 | 1 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 22 |
| large size of site | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 6 |

Table 38. Continued - Aspects of site liked by Blackfoot River users, 1976

| Aspects of Site Liked | River Sections | | | | | | | | | | | | | | | | | | | | | | | Total Respondents (N=372) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| remoteness | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 10 |
| small size of campsite | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 6 |
| cleanliness | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 5 |
| safe area for children | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| Blackfoot River | 2 | 2 | 1 | 0 | 2 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 14 |
| Clearwater River | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 5 |
| Harpers Lake | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| undeveloped | 0 | 1 | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 11 |
| opportunity for activity | 5 | 0 | 1 | 1 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 2 | 1 | 13 | 4 | 0 | 1 | 49 |
| other | 4 | 0 | 1 | 1 | 3 | 0 | 1 | 0 | 3 | 5 | 1 | 0 | 1 | 2 | 1 | 0 | 1 | 1 | 2 | 6 | 1 | 0 | 1 | 26 |
| Total | 68 | 9 | 13 | 8 | 33 | 17 | 8 | 8 | 10 | 22 | 3 | 6 | 1 | 9 | 12 | 3 | 7 | 8 | 21 | 86 | 10 | 0 | 10 | 372 |

Table 39. Aspects of site disliked by Blackfoot River users, 1976.

| Aspects of Site Disliked | River Sections | | | | | | | | | | | | | | | | | | | | | | | Total Respondents (N=220) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| litter | 12 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 21 |
| crowds | 6 | 0 | 2 | 0 | 4 | 4 | 0 | 1 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 31 |
| entrance road | 5 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 11 |
| no drinking water | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 7 | 0 | 0 | 0 | 14 |
| no firewood | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 6 |
| no garbage cans | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 |
| toilet maintenance | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| dust | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| road too close to site | 0 | 1 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 7 |
| vandalism | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 4 |
| the fishing | 0 | 0 | 1 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 5 | 0 | 0 | 1 | 13 |

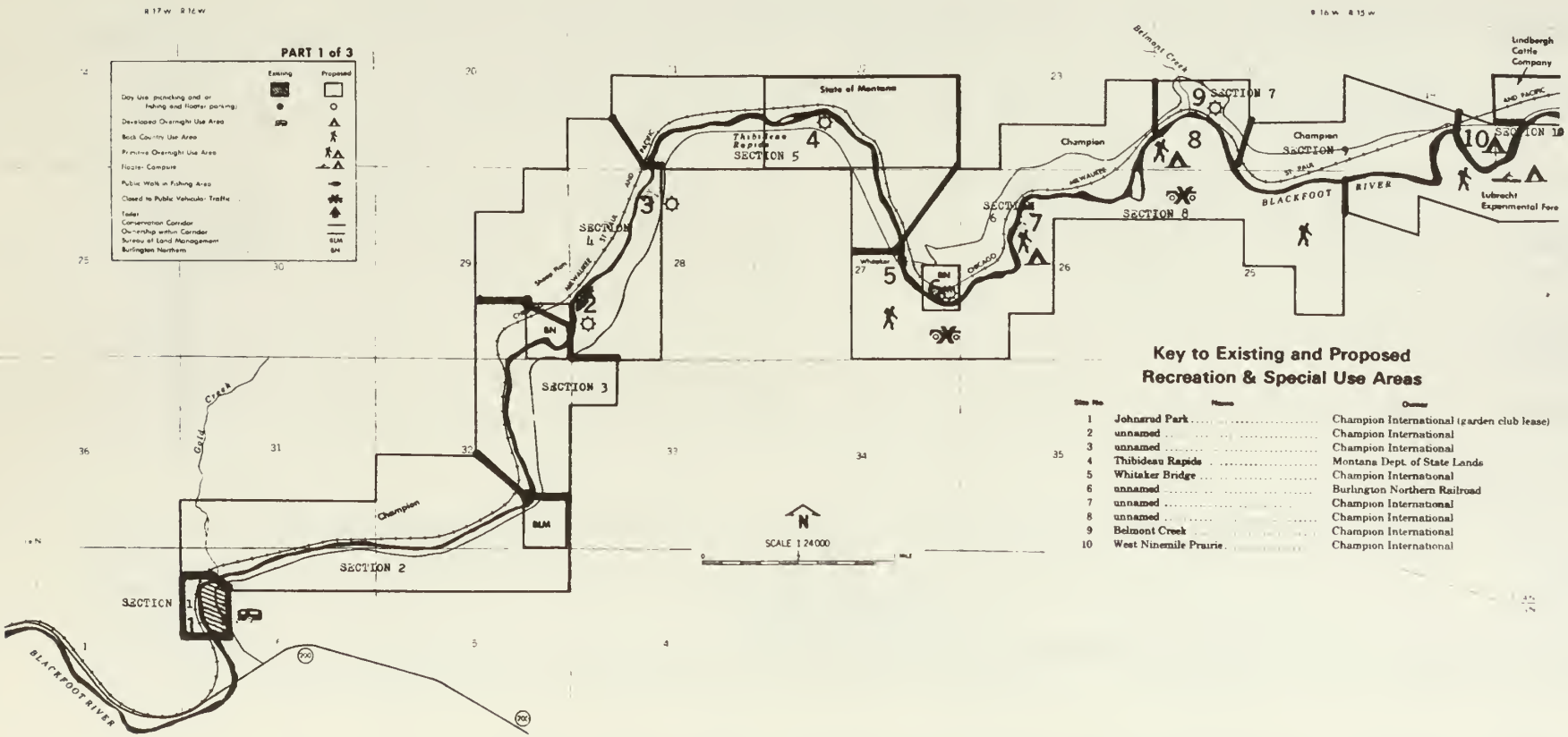
Table 39. Continued - Aspects of site disliked by Blackfoot River users, 1976.

| Aspects of Site Disliked | River Sections | | | | | | | | | | | | | | | | | | | | | | | Total Respondents (N=220) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| fires prohibited | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| camping prohibited | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 10 |
| no toilets | 1 | 0 | 1 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 10 |
| no picnic tables | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 6 |
| weeds | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 |
| site maintenance | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| lack of shade | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 4 |
| steep riverbank | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| unleashed dogs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 |

Table 39. Continued - Aspects of site disliked by Blackfoot River users, 1976.

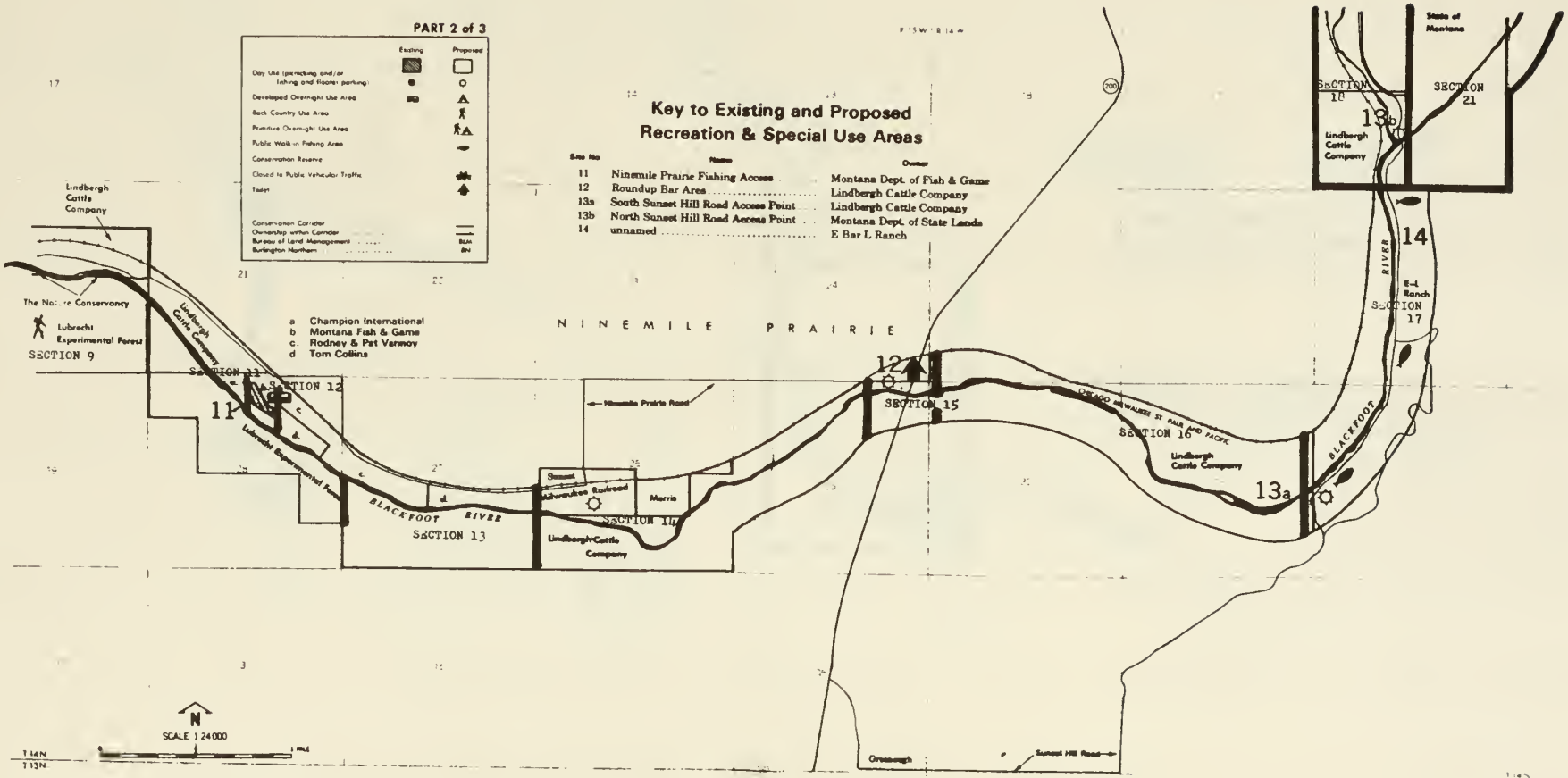
| Aspects of Site Disliked | River Sections | | | | | | | | | | | | | | | | | | | | | | | Total Respondents (N=220) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| motorcycles | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| insects | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 6 |
| campsite restrictions | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| limited parking | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 3 |
| other | 4 | 1 | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 2 | 0 | 7 | 3 | 0 | 3 | 31 |
| Total | 56 | 4 | 8 | 3 | 19 | 9 | 8 | 2 | 3 | 12 | 4 | 3 | 1 | 3 | 4 | 0 | 3 | 8 | 11 | 46 | 6 | 0 | 7 | 220 |

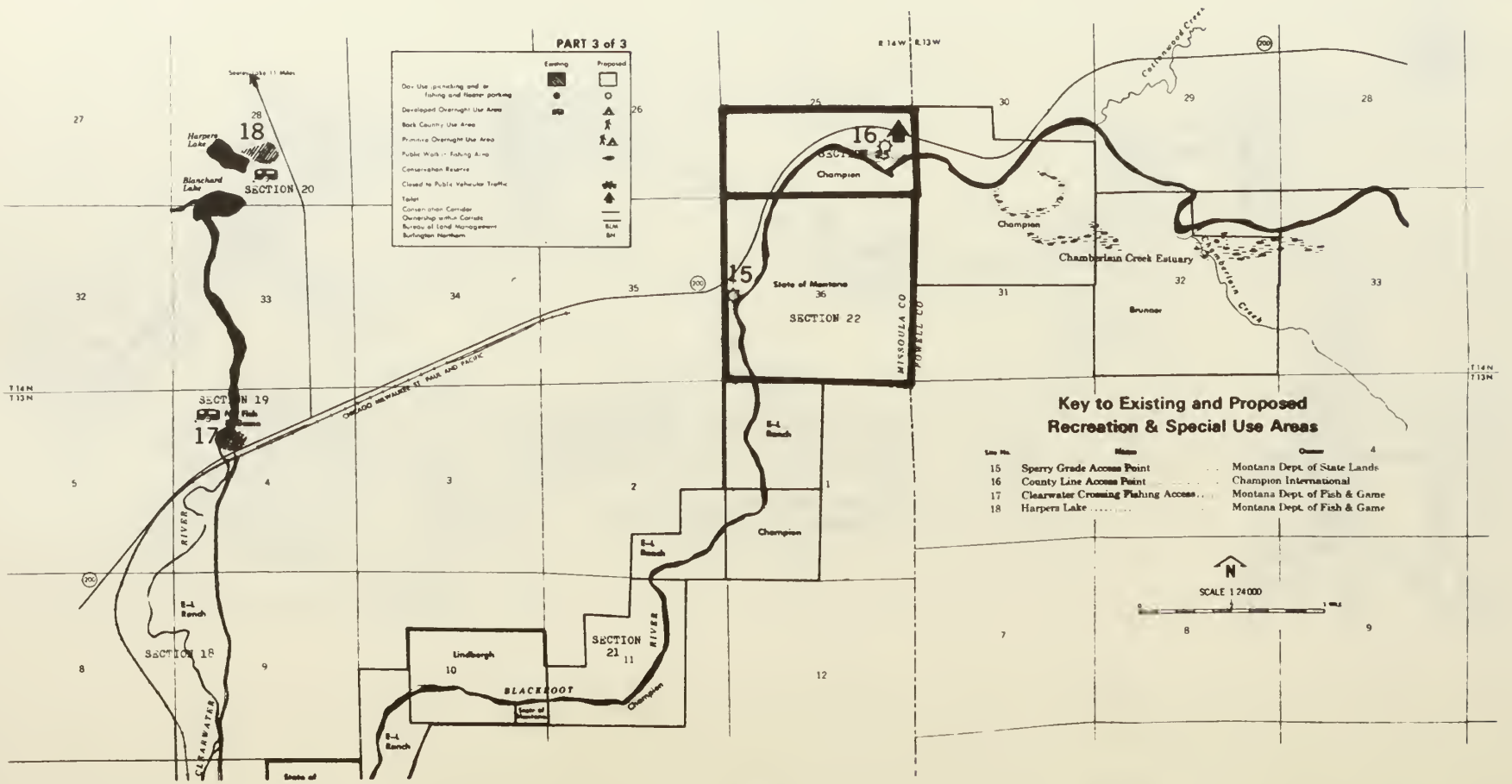
SECTION MAPS




## Key to Existing and Proposed Recreation & Special Use Areas

| Site No. | Name | Owner |
|---|---|---|
| 1 | Johnsrud Park | Champion International (garden club lease) |
| 2 | unnamed | Champion International |
| 3 | unnamed | Champion International |
| 4 | Thibideau Rapids | Montana Dept. of State Lands |
| 5 | Whitaker Bridge | Champion International |
| 6 | unnamed | Burlington Northern Railroad |
| 7 | unnamed | Champion International |
| 8 | unnamed | Champion International |
| 9 | Belmont Creek | Champion International |
| 10 | West Ninemile Prairie | Champion International |


PART 2 of 3
Existing
Proposed
Day Use (picnicking and/or fishing and floater portaging)
Developed Overnight Use Area
Back Country Use Area
Primitive Overnight Use Area
Public Walk-in Fishing Area
Conservation Reserve
Closed to Public Vehicular Traffic
Toilet
Conservation Corridor
Ownership within Corridor
Bureau of Land Management
Burlington Northern
BLM
BN
Key to Existing and Proposed
Recreation & Special Use Areas
Site No
Name
Owner
11 Ninemile Prairie Fishing Access Montana Dept. of Fish & Game
12 Roundup Bar Area Lindbergh Cattle Company
13a South Sunset Hill Road Access Point Lindbergh Cattle Company
13b North Sunset Hill Road Access Point Montana Dept. of State Lands
14 unnamed E Bar L Ranch
a Champion International
b Montana Fish & Game
c Rodney & Pat Vannoy
d Tom Collins
NINEMILE PRAIRIE
Lindbergh Cattle Company
The Nature Conservancy
Lubrecht Experimental Forest
SECTION 9
SECTION 12
SECTION 13
SECTION 15
SECTION 16
SECTION 17
SECTION 18
SECTION 21
BLACKFOOT RIVER
Ninemile Prairie Road
Sunset Hill Road
Missoula
Ovando
State of Montana
E-L Ranch
N
SCALE 1:24000
T 14 N
T 13 N


PART 3 of 3
Existing
Proposed
Harpers Lake
Blanchard Lake
SECTION 20
SECTION 19
SECTION 18
SECTION 22
SECTION 21
16
15
17
18
Champion
State of Montana
MISSOULA CO
POWELL CO
Chamberlain Creek Estuary
Brunner
Cottonwood Creek
Chamberlain Creek
CHICAGO MILWAUKEE ST PAUL AND PACIFIC
RIVER
CLEARWATER
BLACKFOOT
Lindbergh
T 14 N
T 13 N
R 14 W
R 13 W
Key to Existing and Proposed
Recreation & Special Use Areas
15 Sperry Grade Access Point — Montana Dept. of State Lands
16 County Line Access Point — Champion International
17 Clearwater Crossing Fishing Access — Montana Dept. of Fish & Game
18 Harpers Lake — Montana Dept. of Fish & Game
N
SCALE 1:24000